

Cy-COOH

Structure attributes must be viewed using STN Express query preparation.

=> file casreact COST IN U.S. DOLLARS

SINCE FILE TOTAL SESSION ENTRY 0.66 0.45

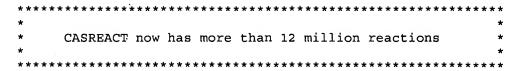
FULL ESTIMATED COST

FILE 'CASREACT' ENTERED AT 08:47:52 ON 27 FEB 2007 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE CONTENT:1840 - 25 Feb 2007 VOL 146 ISS 9

New CAS Information Use Policies, enter HELP USAGETERMS for details.



Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

SAMPLE SEARCH INITIATED 08:47:57 FILE 'CASREACT' SCREENING COMPLETE -2 REACTIONS TO VERIFY FROM

2 DOCUMENTS

100.0% DONE 2 VERIFIED 0 HIT RXNS

0 DOCS

SEARCH TIME: 00.00.01

Habte

02/26/2007

10/554,090 Page 5

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED VERIFICATIONS: 2 TO 124
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1 (0 REACTIONS)

=> s l1 sss full

FULL SEARCH INITIATED 08:48:05 FILE 'CASREACT'

SCREENING COMPLETE - 111 REACTIONS TO VERIFY FROM 36 DOCUMENTS

100.0% DONE 111 VERIFIED 15 HIT RXNS 5 DOCS

SEARCH TIME: 00.00.04

L3 5 SEA SSS FUL L1 (15 REACTIONS)

=> d fhit abs ibib tot

L3 ANSWER 1 OF 5 CASREACT COPYRIGHT 2007 ACS on STN

RX(17) OF 32 AS + A ---> AT

AT YIELD 62%

RCT AS 1148-11-4 RX (17)

> STAGE(1) RGT G 538-75-0 DCC SOL 75-09-2 CH2Cl2 CON 1 hour, 0 deg C STAGE (2)

RCT A 60498-33-1 CON 1 - 3 day, room temperature

PRO AT 866005-83-6 A series of amino acid amides and peptide amides of 6-amino-2-phanyl-4H-3,1-benzoxain-4-one were synthesized and tested in vitro for their inhibitory activity towards human leukocyte elastase (HLE). When

ared
to their values without inhibitors, the residual enzymic activities
decrease with time, indicating a time-dependent inhibition. The most
potent inhibitions were obtained when Cb2-Alg-(Pmc), Cb2-Val-Phe,
Cb2-Ala-Val or Cb2-Val-Ala are linked to the 6-amin group.
SSION NUMBER: 143:347431 CASREACT
E: Synthesis and anti-elastase properties of
6-amino-2-phenyl-4H-3,1-benzoxazin-4-one aminoacyl ACCESSION NUMBER: TITLE:

and

dipeptidyl derivatives

ANSWER 2 OF 5 CASREACT COPYRIGHT 2007 ACS on STN

RX (6) OF 14 ...P + O + 2 S ---> 2 T

T YIELD 73% YIELD 73%

P 5766-76-7, O 198069-31-7, S 108-24-7 T 325850-36-0 71-43-2 Benzene SUBSTAGE(1) room temperature SUBSTAGE(2) 10 hours, 50 - 60 deg C chemoselective RX (6)

NTE GI

AB Anthranilic acid imines underwent rangement (I) R = Ph, 4-nitrophenyl, 2-hydroxyphenyl, trichloro-2-thienyl).
Acetylation of the tautomers by Ac2O or by Accl in the presence of pyridine occurred on the N atom of I; acetylation of an anthranilic acid imine by Accl-EtJN gave the mixed anhydride, which was hydrolyzed to

L3 ANSMER 1 OF 5
CASREACT COPYRIGHT 2007 ACS on STN (Continued)
AUTHOR(S):
CORPORATE SOURCE:
Laboratoire de Biochimie Analytique et Synthese
Bioorganique, Universite Claude Bernard Lyon 1,
Villeurbanne cedex, 69 622, Fr.
Biochimie (2005), 87(2), 223-230
CODEN: BICHBE; ISSN: 0300-9084
Elsevier B.V.
DOCUMENT TYPE:
DOCUMENT TYPE:
LANGUAGE:
English
English
English
English PUBLISHER: DOCUMENT TYPE: LANGUAGE: REFERENCE COUNT: THIS English
31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L3 ANSWER 2 OF 5 CASREACT COPYRIGHT 2007 ACS on STN (Continued)
starting material.
ACCESSION NUMBER:
111:378876 CASREACT
TITLE:
Synthesis end explation of anthranilic acid imines
AUTHOR(S):
Kon'kova, S. G.; Abovyan, G. M.; Khachatryan, A. Kh.;
Badasyan, A. E.; Konoyan, P. S.; Sargeyan, M. S.
CORPORATE SOURCE:
Inst. Org. Khim., NAN Arm., Yerevan, Armenia
SOURCE:
PUBLISHER:
DCUMENT TYPE:
LANGUAGE:
ANGUAGE:
RUSSIAN
RUSSIA

02/26/2007

L3 ANSWER 3 OF 5 CASREACT COPYRIGHT 2007 ACS on STN

RX(15) OF 27 COMPOSED OF RX(3), RX(4) RX(15) J + M ===> N

STEPS

N YIELD 39%

RCT J 497106-60-2 RX(3)

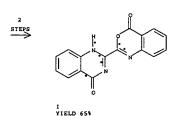
> STAGE(1) RGT K 1310-58-3 KOH SOL 64-17-5 EtOH CON 2 hours, reflux STAGE(2)

RGT E 7647-01-0 HCl SOL 7732-18-5 Water

PRO B 118-92-3

ANSWER 4 OF 5 CASREACT COPYRIGHT 2007 ACS on STN

RX(21) OF 47 COMPOSED OF RX(1), RX(5) RX(21) A + B + H ===> I



RX(1) RCT A 75-12-7, B 31143-83-6 PRO C 29113-33-5

RX (5)

RCT H 118-92-3, C 29113-33-5 PRO I 153776-81-9 GΙ

L3 ANSWER 3 OF 5 CASREACT COPYRIGHT 2007 ACS on STN RX(4) RCT M 114842-08-9 (Continued) STAGE(1)
RGT 0 10026-13-8 PC15
SOL 71-43-2 Benzene
CON SUBSTAGE(1) 2 hours, reflux
SUBSTAGE(2) reflux -> 0 deg C AGE (2) RCT B 118-92-3 RGT P 110-86-1 Pyridine CON SUBSTAGE(1) 0 deg C SUBSTAGE(2) 3 hours, room temperature PRO N 497106-61-3 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Treatment of 5,6-dimethoxy-2-(methylphenylcarbamoyl)benzofuran-3-carboxylic acid (I) with PPA yielded the title compound (II). The

carboxylic acid (I) with PPA yielded the citie composite (I) analogous 2-[(5,6-dimethoxybenzofuran-2-carbonyl)methylaminolbenzoic acid was resistant to cyclization, whereas 2-[(6-methoxybenzofuran-2-carbonyl)aminolbenzoic acid (III) underwent cyclization to the corresponding 3,1-benzoxezin-4-one (IV).

ACCESSION NUMBER: 138:170093 CASRACT
TITLE: Synthesis of 2,3-dimethoxy-7-methyl-7,12-dihydro-6H-[1]benzofuro[2,3-c] (I]benzazepine-6,12-dione
AUTHOR(S): Jackson, Yvette A.: Marriott, Karla-Sue C.
CORPORATE SOURCE: Department of Chemistry, University of the West Indies, Mone, Kingston, Jamaica
SOURCE: Molecules [online computer file] (2002), 7(3),

FORMAT

CODEN: MOLEFW; ISSN: 1420-3049

URL:
http://www.mdpi.org/molecules/papers/70300353.pdf
PUBLISHER: Molecular Diversity Preservation International
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE F

THERE ARE 23 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 4 OF 5 CASREACT COPYRIGHT 2007 ACS on STN (Continued)

2-Ethoxycarbonyl-4(3H)-quinazolinone (I; R = OEt) reacts with piperidine, methylamine and anthranilic acid to give the Mannich bases, e.g. II and III, and 4H-3,1-benzoxazin-4-one deriva, e.g. IV. The behavior of the latter towards some nitrogen nucleophiles has been described. Compound I (R

I (R

- OEt) also reacts with hydrazine and gives the corresponding hydrazide
(I; R = NHNN2), the behavior of which towards aldehydes, ketones, and Ph
isocyanate has also been discussed.

ACCESSION NUMBER:
110: 5717516 CASRRACT
TITLE: 5717518 and reaction of 2-ethoxycarbonyl-4(3H)quinazolinone with nitrogen nucleophiles
AUTHOR(S): Annie, M. S.; El-Hashash, M. A.; Attia, I. A.
CORPORATE SOURCE: Fac. Sci., Ain Shama Univ., Cairo, Egypt
Indian Journal of Chemietry, Section B: Organic
Chemistry Including Medicinal Chemistry (1993),
32B(S), 577-80
CODEN: IJSBDB; ISSN: 0376-4699
Journal
English

Page 8

L3 ANSWER 5 OF 5 CASREACT COPYRIGHT 2007 ACS on STN

RX(2) OF 121 ...A + E ---> F

RCT A 104968-06-1, E 150-13-0 PRO F 104967-80-8 SOL 64-17-5 EtOH RX (2)

GΙ

L3 ANSWER 5 OF 5 CASREACT COPYRIGHT 2007 ACS on STN (Continued)

AB The title dyes I (X, Z = 0, NH; Y = H, 5-Me, 5-Me0, 5-02N, 5-Cl, 5-M02C, 7-M0, 5,6-benzo, 6,7-benzo) were prepared by treatment of II (X = 0, NH) with the appropriate phenols and/or arylamines. The new cyanines were identified by spectral determination Bactericidal and fungicidal activity of selected cyanines were tested.

ACCESSION NUMBER: 105:174394 CASREACT
TITLE: Synthesis, spectral behavior and biological activity of the selection of th

oynthesis, spectral behavior and biological activity of benzoxazonyl (quinoxalonyl) benzofurano (indolo) quinol ine apocyanine dyes
AUTHOR(S):

AUTHOR(S):

Khalil, Z. H.; Koraiem, A. I. M.; El-Maghraby, M. A.;
Abu-El-Hamd, R. M.

CORPORATE SOURCE:

SOURCE:

JOurnal of Chemical Technology and Biotechnology (1986), 36(8), 379-88

CODEN: JCTBED; ISSN: 0268-2575

DOCUMENT TYPE:
LANGUAGE:

Briglish

```
10/554,090
                 Page 3
ring nodes :
```

1 2 3 4 5 6 7 8 9 10

chain bonds : 8-12 10-11 ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10

exact/norm bonds :

5-7 6-10 7-8 8-9 8-12 9-10 10-11

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 isolated ring systems :

containing 1 :

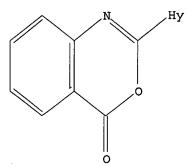
Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:CLASS 12:Atom Element Count : Node 12: Limited C, C3-5 N, N1-2

L1 STRUCTURE UPLOADED

=> d l1L1 HAS NO ANSWERS Ll STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 14:13:38 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -472 TO ITERATE

100.0% PROCESSED 472 ITERATIONS 8 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE**

PROJECTED ITERATIONS: 8137 TO 10743 8 TO PROJECTED ANSWERS: 329

Habte 02/26/2007 10/554,090 Page 4

L2 8 SEA SSS SAM L1

=> s l1 sss full FULL SEARCH INITIATED 14:13:44 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9173 TO ITERATE

100.0% PROCESSED 9173 ITERATIONS 242 ANSWERS

SEARCH TIME: 00.00.01

L3 242 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 172.10 172.31

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FILE COVERS 1907 - 26 Feb 2007 VOL 146 ISS 10 FILE LAST UPDATED: 25 Feb 2007 (20070225/ED)

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http://www.cas.org/infopolicy.html

=> s 13

L4 79 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2007:53872 CAPLUS COPYRIGHT TITLE: Preparation of Title: Preparation of Title:

INVENTOR (S):

146:163116
Preparation of N-thio-anthranilamide compounds and their use as pesticides
Schmidt, Thomas; Puhl, Michael; Dickhaut, Joachim;
Bastiaans, Henricus Maria Martinus; Rack, Michael;
Culbertson, Deborah L.; Anspaugh, Douglas D.; Braun,
Franz-Josef; Bucci, Toni; Cotter, Henry Van Tuyl;
Kuhn, David O.; Oloumi-Sadeghi, Hassan
BASF Aktiengesellschaft, Germany
PCT Int. Appl., 231pp.
CODEN: PIXXD2
Patent

PATENT ASSIGNEE(S):

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. KIND DATE DATE WO 2006-EP63761 20060630
BB, BG, BR, BW, BY, BZ, CA, CH, DZ, EC, EE, EG, ES, FI, GB, GD, IN, IS, JP, KE, KG, KM, KM, KP, LU, LV, LY, MA, MD, MG, MK, MY, GM, PG, PH, PL, PT, RO, RS, RU, TJ, TM, TN, TR, TT, TZ, UA, UG, WO 2007006670 AE, AG, CN, CO, GE, GH, KR, KZ, MW, MX, SC, SD, US, UZ, AT, BE, IS, IT, CF, CG, GM, KE, KG, KZ, A1 AM., CU., HN, LC., NA., SG., VN., CH., LU., MW., 20070118 AU, DE, HU, AT, CZ, HR, LK, NG, SK, ZA, CY, LV, GA, MZ, TJ, AL. CR. GM. LA. MZ. SE. VC. BG. LT. CI. LS, MD. LR, NI, SL, ZM, CZ, MC, GN, NA, TM

PRIORITY APPLN. P 20050707 US 2005-697166P

GΙ

ANSWER 2 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 2006:1173505 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

2006:1173505 CAPLUS
145:489357
Preparation of pyrrolylcarbonyl anthranilamides as pest control agenta
Koyanagi, Toru; Mortta, Masayuki; Ueki, Toshihiko Ishihara Sangyo Kaieha, Ltd., Japan
PCT Int. Appl., 50pp.
CODEN: PIXXD2
Patent

INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 20061109 A1 2 AM, AT, CU, CZ, HR, HU, LR, LS, NI, NO, WO 2006118267 20060428 WO 2006-JP309025 118267
AE, AG.
CN, CO,
GE, GH,
KZ, LC,
MZ, NA,
SG, SK,
VN, YU,
AT, BE,
IS, IT,
CF, CG,
GM, KE,
KG, KZ,
LN, INFO 20061109 WO 2006-JP309025 AU, AZ, BA, BB, BG, BR, BM, DE, DK, DM, DZ, EC, EE, EG, ID, IL, IN, IS, JP, KE, KG, LT, LU, LV, LY, MA, MD, MG, MZ, OM, PG, PH, PL, PT, RO, TJ, TM, TN, TR, TT, TZ, UA, 20060428
BY, BZ, CA, CH,
ES, FI, GB, GD,
KM, KN, KP, KR,
MK, MN, MW, MX,
RU, SC, SD, SE,
UG, US, UZ, VC, CR. GM. LK. NG. SL. ZA. BG. LT. CI. SM, ZM, CH, LU, CM, MW, RU, SY, ZW CY, LV, GA, MZ, TJ, CZ, DE, DK, EE, ES, FI, FR, GB, MC, NL, PL, PT, RO. SE, SI, SK, GN, GO, GW, ML, MR, NE, SN, TD, NA, SD, SL, SZ, TZ, UG, ZM, ZW, TM GR, TR, TG, AM, HU, IE, BF, BJ, BW, GH, AZ, BY, MD, PRIORITY APPLN. JP 2005-134582 A 20050502

JP 2006-69614

11

A 20060314

OTHER SOURCE(S): MARPAT 145:489257

Title compde. I [R1 = halo or slkyl; R2 - R5 = H, halo, slkyl, etc.; R6 = halo or (halo)slkyl; A = H, (un)substituted slkyl, etc.; X = N or

L4 ANSWER 1 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
AB N-thic-anthranilamide compds. I [A is a substituted amino sulfoxide or imino sulfoxide; R1 is M, substituted alkyl, alkenyl, or cycloalkyl; 01 and 02 are independently M, halogen, CN, SCN, nitro, OM, halogen, cull substituted alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, alkylethio, alkylesulfonyl, alkylesulfonyloxy, alkylemino, cycloalkylamino, alkylearbonyl, alkoxyezbonyl, alkylaminocarbonyl, or alkylesilyl; 03 is halogen-(un) substituted alkyl, alkenyl, alkynyl, elkynyl, or cycloalkyl; 04 is halogen-(un) substituted alkyl, alkenyl, alkynyl, alkylamino, alkylesulfonyl, alkylesulfonylesulfonyl, alkylesulfonyl, al

nematodes, and in methods for treating, controlling, preventing or protecting animals against infestation or infection by parasites.

Compds.

Of formula I and compns. comprising them can also be used for controlling and preventing infestations and infections in animals including warm-blooded animals (including humans) and fish. Thus, anthranilamide

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 2 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (un) substituted CH, with limitations) or their N-G

ANSMER 2 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) (un) substituted CH, with limitations) or their N-oxides and salts were prepd. as pest control agents. Thus, cyclization of -chloropyridin-2191-4-bromepyrrole-2-carboxylic acid, which was obtained from pyrrole and 2,3-dichloropyridine, with 5-chloro-3-methylanthranilic acid in the presence of methanesulfonyl chloride followed by ring-opening of the resultant benzoxazine with α-methylcyclopropylmethanemine gave II (R = Br). It schloro analog II (R = Cl) showed 2 90% control against Prodenia litura at a concn. of 12.5 ppm.
914457-31-P 914457-29-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(nestent or reagent) (preparation of pyrrolylcarbonyl anthranilamides as pest control agents via

ring-opening of pyrrolylbenzoxazine with amines)
914457-23-1 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[4-bromo-1-(3-chloro-2-pyridinyl)-1H-pyrrol-2yl)-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

RN 914457-29-7 CAPLUS
CN 1H-Pyrrole-2-carboxaldehyde,
5-(6-chloro-8-methyl-4-oxo-4H-3,1-benzoxazin2-yl)-1-(3-chloro-2-pyridinyl)-, 2-(0-methyloxime) (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 21 CITED REFERENCES AVAILABLE FOR 21

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

Habte

L4 ANSMER 3 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1120573 CAPLUS

DOCUMENT NUMBER: 15:455006

INVENTOR(S): 26:455006

Preparation of cyanoanthranilamides as insecticides and acaricides

Jeanguenat, Andre; O'Sullivan, Anthony; Muehlebach, Michel; Trah, Stephan; Mall, Roger Graham

PATENT ASSIGNEE(S): 50URCE: 27:45000

DOCUMENT TYPE: PATENT ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

EM1 1	NION		014.														
PAT	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
						-									-		
WO	2006	1113	41		A1		2006	1026		WO 2	006-	EP35	04		2	0060	418
	W:	AE.	AG.	AL.	AM.	AT.	AU.	AZ.	BA,	BB,	BG,	BR,	BW.	BY.	BZ.	CA.	CH.
		CN.	co.	CR.	CU.	CZ.	DE.	DK.	DM.	DZ.	EC.	EE,	EG.	ES.	PI.	GB,	GD.
		GE.	GH.	GM.	HR.	HU.	ID.	IL.	IN.	IS.	JP.	KE.	KG.	KM.	KN.	KP.	KR.
		KZ.	LC.	LK.	LR.	LS.	LT.	LU.	LV.	LY.	MA.	MD.	MG.	MK.	MN.	MW.	MX.
		MZ.	NA.	NG.	NI.	NO.	NZ.	OM.	PG.	PH.	PL.	PT.	RO.	RU.	sc.	SD.	SE.
							TJ,										
					ZM,			••••			,		,	,	,	,	
	pw.						CZ.	DE.	DK.	EE.	ES.	FI.	FR.	GB.	GR.	HU.	IR.
							MC,										
							GN,										
							NA,										
					RU.			٠.,	,	·	,		,	,			,
ORITY	APP				,	,	•			GB 2	005-	7989			A 2	0050	420
										GB 2	005-	2506	0		A 2	0051	208

OTHER SOURCE(S):

PRI

MARPAT 145:455006

Title compds. [I; E, Z = 0, S; A = (substituted) alkylene, alkenylene, alkynylene, bivalent mono- or bicyclic ring; X = 0, NH, alkylimino; Y = (substituted) mono- or bicyclic ring; p, q = 0, 1; B = (substituted) 3-4

L4 ANSWER 3 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) L4 ANSWER 3 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
membered (heterocyclic) ring; R1 = halo, NO2, cyano, OK, alkyl, alkenyl,
alkynyl, cycloalkyl, haloalkyl, (aubstituted) Ph, PhCH2, PhO, etc.; n =
0-3; R2, R3 = H, alkyl, alkenyl, alkynyl, aubstituted cycloalkyl; D =
(aubstituted) Ph, pyridyl, pyrrolyl, pyraxolyl, pyrimidyl), were prepd.
Thus, 2-[2-(3-chloropyridin-2-yl)-5-trifluoromethyl-2H-pyrazol-3-yl]-8methyl-4-oxo-4H-benzo[d] (3.]30xazin-6-carbonitrile,
bicycloprop-1-ylamine
hydrochloride (prepn. given), and Et3N were heated together in THF at
60° for 8 h to give 2-(3-chloropyridin-2-yl)-5-trifluoromethyl-2Hpyraxole-3-carbonylic acid [2-(bicycloprop-1-ylarbamoyl)-4-cyano-6methylphenyl]amide. The latter at 400 ppm showed >80% activity against
Cydia pomonella.

IT 500028-90-0 736995-60-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cyanoanthranilamides as insecticides and acaricides)
RN 500028-90-0 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)H-pyrazol-5-yl]-6-iodo-8-methyl- (9CI) (CA INDEX NAME)

736995-60-1 CAPLUS 4H-3,1-Benzoxasine-6-carbonitrile, 2-[1-(3-chloro-2-pyridinyl)-3-(crifluoromethyl)-1H-pyrazol-5-yll-8-methyl-4-oxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSMER 4 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2006:1048454 CAPLUS DOCUMENT NUMBER: 146:38411
TITLE: OSAP = FULL OSA

2006:1048454 CAPLUS
146:38411
QSAR study of antiplatelet agents
Katritzky, Alan R.; Pacureanu, Liliana M.; Slavov,
Svetoslav; Dobchev, Dimitar A.; Karelson, Mati
Center for Heterocyclic Compounds, Department of
Chemistry, University of Florida, Gainesville, FL,
J2611, USA
Bioorganic & Medicinal Chemistry (2006), 14(22),
7490-7500
CODEN: BMECEP; ISSN: 0968-0896 AUTHOR(S): CORPORATE SOURCE:

SOURCE:

CODEN: BMECEP; ISSN: 0968-0896 Elsevier Ltd.

PUBLISHER:

LISHER: Elsevier Ltd.

UMENT TYPE: Journal

JUAGE: Elsevier Ltd.

A GSAR methodol. that involves multilinear (Hansch-type) and nonlinear

(ANN back propagation) approaches was developed to correlate the
antiplatelet activity of 60 benzoxazionol deriva. against factor Xa. The
statistical characteristics provided by multilinear model (R2 = 0.821)
indicated satisfactory stability and predictive sbility, while the ANN
predictive ability is somewhat superior (R2 = 0.909). The multilinear
model provided insight into the main factors that modulate the inhibitory
activity of the investigated compds.
916481-14-6 916481-15-7

RL: PAC (Pharmacological activity), THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(OSAR study of antiplatelet agents)
916481-14-6 CAPLUS

4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-8-nitro- (CA INDEX
NAME)

916481-15-7 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-7-nitro- (CA INDEX NAME)

THERE ARE 39 CITED REPERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 4 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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L4 ANSWER 5 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2006:768139 CAPLUS DOCUMENT NUMBER: 145:211038 TITLE: Preparation of The Prep
                                                                                                                                                                                                                                         145:211038
Preparation of pyrazolyl moiety-containing anthranilamide compounds as pest control agents Koyanagi, Toru; Yokeda, Tetsuo; Higuchi, Koji; Kiriyama, Kazuhisa; Taguchi, Yohei; Hamamoto, Taku Ishihara Sangyo Kaisha, Ltd., Japan PCT Int. Appl., 31pp.
CODEN: PIXXD2
Patent
         INVENTOR(S):
      PATENT ASSIGNEE(S):
SOURCE:
      DOCUMENT TYPE:
                                                                                                                                                                                                                                                Patent
Japanese
           FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NO.
                                                       PATENT NO.
                                                                                                                                                                                                                                                KIND
                                                                                                                                                                                                                                                                                                            DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DATE
                                                                                                                                                                                                                                      A1 20060803 WO 2006-JP301057 2

A1 20060803 WO 2006-JP301057 2

AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, HR, HU, ID, IL, IN, IS, JP, KE, KG, DM, KN, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, NI, NO, NZ, OM, PG, PH, PL, PT, PO, RU, SC, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, CM, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, CM, GA, GN, GO, GM, ML, MR, NE, SN, TD, TG, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZM, AM, RU, TJ, TM

A 20060907 JP 2006-12161 20
MO 2006683311

W: AE, AG, AL,
CN, CO, CR,
GE, GH, GM,
KZ, LC, LK,
MZ, NA, NG,
SG, SK, SL,
VN, YU, ZA,
RW AT, BE, BG,
115, IT, LT,
CF, CG, CI,
GM, KE, LS,
KG, KZ, MD,
JP 2006232814
PRIORITY APPLN, INPO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20060124
BY, BZ, CA, CH,
ES, FI, GB, GD,
KM, KN, KP, KR,
MK, MN, MW, MX,
RU, SC, SD, SE,
UG, US, UZ, VC,
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BF,
BW,
AZ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20060120
A 20050125
      OTHER SOURCE(S):
                                                                                                                                                                                                                                                MARPAT 145:211038
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DOCUMENT NUMBER: TITLE:

INVENTOR (S):

The title compds. I [R1 = halo, alkyl, alkenyl, etc.; R2 = H, halo,

L4 ANSWER 6 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2006:630314 CAPLUS DOCUMENT NUMBER: 145:57521

AB The title compds. I [R1 = haio, siny, siny, siny, siny, etc.; R3 = halo, sikyl, alkoxy, etc.; A = sikyl substituted by Y; Y = cycloalkyl which may be substituted by at least one substituent selected from the group consisting of halo, alkyl and haloalkyl; m = 0 - 4; n = 0

Insecticidal and acaricidal mixtures comprising a

L4 ANSWER 5 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
5] are prepd. Thus,

N-[4-chloro-2-[[(1-cyclopropylethyl)| amino]carbonyl]-6methylphenyl]-1-(2-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazole-5carboxamide was prepd. from 1-cyclopropylethylamine hydrochloride and
6-chloro-2-[1-(2-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8methyl-4H-3,1-benzoxazin-4-one. Compds. of this invention at 50 ppm gave
2 901 kill of Spodoptera litura larvae.

IT 904733-67-1 904733-69-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrazolyl moiety-containing anthranilamide compds. as pest control agents)
904733-67-1 CAPUS
4H-3,1-Benzoxazin-4-one, 6-chloro-2-[1-{2-chloropheny1}-3-(trifluoromethy1)-1H-pyrazol-5-y1]-8-methy1- (9CI) (CA INDEX NAME) 904733-69-3 CAPLUS 4H-3,1-Benzoxazin-4-one, 8-chloro-2-(1-(2-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-6-iodo- (9CI) (CA INDEX NAME)

REFERENCE COUNT: FORMAT

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

pyrazolecarboxamide derivative
Annan, Isaac Billy; Hughes, Kenneth Andrew; Lahm,
George Philip; Selby, Thomas Paul; Stevenson, Thomas Martin E.I. Dupont De Nemours and Company, USA PCT Int. Appl., 101 pp. CODEN: PIXXD2 PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO DATE A1 20060629 AM, AT, AU, AZ, BA, CU, CZ, DE, DK, DM, HR, HU, ID, IL, IN, LS, LT, LU, LV, MA, NZ, OM, PG, PH, PL, TJ, TM, TN, TR, TT, WO 2005-US26116 BB, BG, BR, BW, DZ, EC, EE, EG, IS, JP, KE, KG, MD, MG, MK, MN, PT, RO, RU, SC, TZ, UA, UG, US, WO 2006068669 20050722 0.68669 A1 20060629 W0 2005-US26116
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BM, BY, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, GE, GR, GM, HR, HU, ID, II, IN, IS, JP, KE, KG, KM, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, AZ, ZM, ZW
AT, BE, BG, CR, CY, CZ, DE, DK, EE, ES, PI, FR, GB, IS, IT, LT, LU, LV, MC, NIL, PL, PT, RO, SE, SI, SK, CF, CG, CI, CM, GA, GN, GG, GW, ML, MR, NE, SN, TD, GM, KE, LS, MM, NZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, KG, KZ, MD, RU, TJ, TM
20060629 AU 2005-319651 20050722 BY, BZ, CA, CH, ES, FI, GB, GD, KM, KP, KR, KZ, MW, MX, MZ, NA, SD, SE, SG, SK, UZ, VC, VN, YU, GR. HU. IE. TR. BF. BJ. TG. BW. GH. AM. AZ. BY.

20060629 20050722 20050722 20040726 AU 2005319651 CA 2568560 A1 A1 PRIORITY APPLN. INFO.: US 2005-690007P

OTHER SOURCE(S): MARPAT 145:57521

AB Disclosed are insecticidal and acaricidal mixts. relating to combinations comprising 3-bromo-N-[4-cyano-2-methyl-6] (methylamino) carbonyl) phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-carboxamide (preparation given), an N-oxide, or a salt thereof, and at least one invertebrate pest control agent selected from menoirotinoide, cholinesterase inhibitors, sodium channel modulators, chitin synthesis inhibitors, ecdysone agonists, lipid biosynthesis inhibitors, mercreyclic latcones, GABA-regulated chloride channel blockers, juvenile hormone mimics, ryanodine receptor ligands, octopamine receptor ligands, mitochondrial electron transport inhibitors, nereistoxin analogs, pyridalyl, flonicamid, pymetrozine, dieldrin, metaflumizone, biol. agents, and salts of the foregoing. Target species include Bemisia argentifolii, Franklinnella occidentalis, Emposeca fabee, Peregrinus maidis, Aphia gossypi, Myzus persicae and Plutella xylostella.

17 73695-63-47 736995-64-5P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant): SPN (Synthetic preparation); PREP (Preparation); PREP (Preparation); Preparation); Nact (Reactant): SPN (Synthetic preparation); PREP (Preparation); PREP (Preparation)

ANSWER 6 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN y1]-6-iodo-8-methyl- (9CI) (CA INDEX NAME) (Continued)

RN 736995-64-5 CAPLUS
CN 4H-3,1-Benzoxazine-6-carbonitrile,
2-{3-bromo-1-{3-chloro-2-pyridinyl}-1H-pyrazol-5-yl}-8-methyl-4-oxo- (9CI)

(CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

PORMAT

ANSWER 7 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) N-21, S or G1-C(=G2)-G3; G1 and G3 are independently a bond, O, S, or NZ2;

G2 is O, S or NZ3; Z and Z1-Z3 are independently H, C1-6 (halo)alkyl, (halo)alkenyl, C2-6 (halo)alkynyl, C3-6 (halo)cycloalkyl, C1-4 (halo)alkynyl, C1-6 (halo)alkythho, etc.; Y3 is H, halo or C1-6 (halo)alkyl; Y1b is a bond, or (un)substituted C1-6 alkylene, (un)substituted C2-6 alkenylene, or (un)substituted C3-6 alkynylene; and their tautomers, agrochem, utilizable salts and suxiliary are claimed. Example compd. II was prepd. by amidation of 6-chloro-2-(2-(3-chloropyridin-2-yl)-5-trifluoromethyl-2H-pyrazol-3-yl)-8-methylbenzo(d)[1,3]oxazin-4-one with 1-amino-2-propenol; the resulting 2-(3-chloropyridin-2-yl)-5-trifluoromethyl-2H-pyrazol-3-carboxylic acid (4-chloro-2-(2-hydroxypropylcarbemoyl)-6-methylphenyl]amide underwent substitution with thioacetic acid to give thioacetic acid C2-6

substitution with thioacetic acid to give thioacetic acid

5-[2-(5-chloro-2-([2-(3-chloropyridin-2-yl)-5-trifluoromethyl-2H-pyrazole3-carbonyl]aminol-3-methylbenzoylaminol-1-methylethyl] ester, which
underwent deacetylation and methylation to give the corresponding Me thio
ether, which underwent oxidn. to give the corresponding sulfoxide, which
reacted with trifluoroacetamide to give the corresponding
N-trifluoroacetylated sulfoximide, which underwent deacetylation to give
compd. II. All the invention compds were evaluated for their
insecticidal activity. Some of the tested compds, showed good activity
against Aphis craccivors, Diabrotics balteats, Heliothis vireseens
(application to foliar and egg), Mysus persicae (foliar and systemic
application), Plutella xylostella and Spodoptera littoralis.

IT 438450-40-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of anthranilamide derivs, as
insecticides)
RN 438450-40-9 CAPLUS

ticides)
438450-40-9 CAPLUS
4H-3,1-Benzoxazin-4-one, 6-chloro-2-{1-{3-chloro-2-pyridinyl}-3-{trifluoromethyl}-1H-pyrazol-5-yl}-8-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

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L4 ANSMER 7 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
145:62886
145:62886
Anthranilamide derivatives as insecticides, and their preparation, pesticidal compositions and formulation
Jeanguenat, Andre; O'Sullivan, Anthony Cornelius
SOURCE:
DOCUMENT TYPE:

DOCUMENT TYPE:

CODEN: PIXXD2
Patent
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                       Patent
English
                  PATENT NO.
                                                                                                                                                       APPLICATION NO.
                                                                                       KIND
                                                                                                             DATE
                                                                                                                                                                                                                                       DATE
                  WO 2006061200
                                                                                    A1
AM, AT,
CU, CZ,
HR, HU,
LR, LS,
NI, NO,
                                                                                                                                                        WO 2005-EP13103
                                                                                                               20060615
                                                                                                                                                                                                                                       20051207
                             2005061200
W: AE, AG, AL,
CN, CO, CR,
GE, GH, GM,
KZ, LC, LK,
MZ, NA, NG,
SG, SK, SL,
VN, YU, 2A,
RN: AT, BE, BG,
IS, IT, LT,
CF, CG, CI,
GH, KE, LS,
KG, KZ, MD,
APPLIN: INFO:
                                                                                                               20060615 WO 2005-1
AU, AZ, BA, BB, BG,
DE, DK, DM, DZ, EC,
ID, IL, IN, IS, JP,
LT, LU, LV, LY, MA,
NZ, OM, PG, PH, PL,
TJ, TM, TN, TR, TT,
                                                                                                                                                                                    EPIJ103 20051207
BR. BW. BY. BZ. CA. CH.
EE, EG, ES. FI. GB. GD.
KE, KG. KM. KN. KP. KR.
MD. MG, MK. MN. MW. MX.
PT. RO, RU. SC. SD. SE,
TZ. UA, UG, US. UZ. VC.
                                                                                    LR, LS,
NI, NO,
SM, SY,
ZM, ZW
CH, CY,
LU, LV,
CM, GA,
MW, MZ,
RU, TJ,
                                                                                                               C2, DE, DK, EE, ES, PI, FR, GB, GR, HU, IE, MC, NI, PL, PT, RO, SE, SI, SK, TR, BP, BJ, GN, GO, GM, ML, MR, NE, SN, TD, TG, BW, GN, AA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, TM
                                                                                                                                                       GB 2004-27008
                                                                                                                                                                                                                            A 20041209
OTHER SOURCE(S):
                                                                                      MARPAT 145:62886
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Compds. of formula I, and the agrochem, acceptable salts and all stereoisomers and tautomeric forms of the compds. of formula I can be

as agrochem, active ingredients and can be prepared in a manner known per se. Several examples on formulation of compds. of formula I is also disclosed in this invention. Compds. of formula I wherein El and W2 are independently O or S; R1 is halo, CN, NO2, OH, C1-6 (halo)alkyl, C2-6 (halo)alkynyl, C3-6 (halo)alkoxy, C1-4 (halo)alkoxy, C1-4 (halo)alkoxy, C1-4 (halo)alkylsulfinyl, C1-4 (halo)alkylsulfinyl, C1-4 (halo)alkylsulfinyl, C1-6 (halo)alkylsulfonyl, C1-4 (halo)alkylsulfonyl, C1-4 alkylamino, C2-6 dialkylamino, C3-6 (cycloalkylsulfonyl, C1-6 alkyl, (un)substituted C1-6 alkyl, (un)substituted C2-6 alkynyl, or (un)substituted C2-6 alkenyl, (un)substituted C3-6 alkynyl, or (un)substituted C3-6 alkynyl, (un)substituted pyrrole, (un)substituted pyrrole, or (un)substituted pyrindine; Y1a and Y2 are independently (un)substituted C2-6 alkynyl, (un)substituted C2-6 alkenyl, (un)substituted C2-6 alkynylene, (un)substituted C2-6 alkenylene, (un)substituted C3-6 alkynylene, etc.; G is a bond, O,

L4 ANSWER 8 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:496102 CAPLUS DOCUMENT NUMBER: 144:462625

TITLE: Preparation of anthranilamide derivative insecticides and acaricides

INVENTOR (S): Lahm, George Philip; Selby, Thomas Paul; Stevenson, Thomas Martin; Taggi, Andrew Edmund; Bereznak, James

FIGURE 1. Dupont De Nemours and Co., USA PCT Int. Appl., 97 pp. CODEN: PIXXD2 Patent PATENT ASSIGNEE (S): SOURCE DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT	NO.			KIN		DATE			APPL	I CAT	ION	NO.		D,	ATE	
						-									-		
WO	2006	0559	22		A2		2006	0526	1	WO 2	005-	US 4 2	196		2	0051	118
WO	2006	0559	22		A3		2006	1221									
	W:	ΑE,	AG,	АĿ,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	ÐΥ,	BZ,	CA.	CH,
		CN,	co,	CR,	Cυ,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	Hυ,	ID,	IL,	IN,	ıs,	JP,	KE,	KG,	KM,	KN,	ΚP,	KR,
		KZ,	LC.	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW.	MX,
		MZ,	NA,	NG.	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	sĸ,	ŞL,	SM,	ŞΥ,	TJ.	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	ΥŪ,	ŻA,	ZM,	ZW											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
							GN,										
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	ΚZ,	MD,	Rυ,	ΤJ,	TM										
PRIORITY	APP	LN.	INFO	. :					,	US 2	004-	6291	20P	- 1	P 2	0041	118

US 2005-689414P P 20050610

OTHER SOURCE(S): MARPAT 144:462625

AB The anthranilamide derivs. I and their geometric and stereoisomers, N-oxides, and salts [J = (un)substituted Ph or N-containing heterocycly]; R1 = alkyl alkenyl, alkynyl, etc.; R2 = alkylcarbonyl, alkoxycarbonyl or (di)salkylaminocarbonyl; R3 = (cyclo)sikyl, alkenyl, alkynyl, alkoxy, etc.; R4 = (un)substituted alkylcycloalkyl, alkenyl, alkynyl, alkoxy, etc. alkynylcycloalkyl, cycloalkylakyl, cycloalkylsikenyl, cycloalkylakyl, orallyloyloalkyl, orallyloyloalkyl, oxidaylakyl, thiiranylalkyl, oxetanylalkyl, thiiranylalkyl, oxetanylalkyl, thietanylalkyl, 3-oxetanyl or 3-thietanyl; R5 =

L4 ANSWER 8 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(cyclo)alkyl, haloalkyl, alkenyl alkynyl, etc.] are prepd. as pesticides
for controlling invertebrate pests, specifically insecticides and
acaricides.

IT 886593-61-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate in preparation of anthranilamide derivative
insecticides and
acaricides)
RN 886583-61-5 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-(3-bromon-1-(2-chlorophenyl)-1H-pyrazol-5-yl)-6chloro-8-methyl- (9CI) (CA INDEX NAME)

ANSWER 9 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) formyl, cyanoalkenyl, etc.; R2, R3 = H, (un)substituted alkyl, alkenyl, cycloalkyl, etc.; n = 0, 1-4; p, q = 0 or 1] and I salts, stereoisomers and tautomers are prepd. as a caricides and insecticides. ΙT 438450-40-9

IT 438450-40-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant in preparation of enthranilamide derivative acaricide and insecticide)
RN 438450-40-9 CAPLUS
CN 4H-3.1-Benzoxazin-4-one, 6-chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 9 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
11TILE:
1NVENTOR(S):
1NVENTOR(S):
2006:367128 CAPLUS
144:364548
Preparation of anthranilamide derivative scaricides and insecticides
and insecticides
20'Sullivan, Anthony Cornelius; Hughes, Dave;
Jeanguenat, Andre; Muehlebach, Michel; Loiseleur,
Olivier
PATENT ASSIGNEE(S):
Symgenta Participations AG, Switz.; Syngenta Limited
PCT Int. Appl., 152 pp.
CODEN: PIXXD2
PATENT INFORMATION:
1
English
PAMILY ACC. NUM. COUNT:
PATENT INFORMATION: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE MO 2006040113

WO 2006040113

W: AE, AG, AI,
CN, CO, CR
GE, GH, GM
LC, LK, LR
NA, NG, NI
SK, SL, SM
YU, ZA, ZM
RW: AT, BE, BE
IS, IT, 'LT
CF, CG, CI
GM, KE, LS
PRIORITY APPLN. INFO:: AZ 20060420 MO 2005-EP10891

AM AT, AU, AZ, BA, BB, BG, BR, BW, BY, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, KR, HU, ID, IL, IN, IS, JP, KE, KG, KM, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SY, TJ, TM, TM, TT, TT, TZ, UA, UG, US, CM, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, CM, GA, GN, GQ, GW, ML, ME, NE, SN, TD, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, RU, TJ, TM 20051010 BY, BZ, ES, FI, KM, KP, MN, MW, SC, SD, US, UZ, AL, CR, GM, LR, NI, SM, ZM, BG, 'LT, CI, LS, MD, GR, TR, TG, AM, GB 2004-22556 A 20041011

MARPAT 144:364548

The anthranilamides I (E, Z = O or S; A , Y = alkylene, alkenylene, alkynylene, etc.; X = O, NH or alkyl-substituted NH; B = (un)substituted ving; D = (un)substituted Ph, pyridyl, pyrazolyl, etc.; R1 = amino,

L4 ANSWER 10 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:193331 CAPLUS DOCUMENT NUMBER: 144:274265

DOCUMENT NUMBER: TITLE: Preparation of novel anthranilamides useful for controlling invertebrate pests

INVENTOR(S):

Controlling invertebrate peats
Lahm, George Philip
E.I. Dupont de Nemours and Company, USA
PCT Int. Appl., 87 pp.
CODEN: PIXXD2
Patent PATENT ASSIGNEE (S) : SOURCE:

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATI	ENT	NO.			KIN	D	DATE			APPL	CAT	ION	NO.		D	ATE	
						-									-		
WO :	2006	0237	83		A1		2006	0302	1	WO 2	005-1	US29	639		2	0050	817
	₩:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ.	DE,	DK.	DM,	DZ.	EC,	EÈ.	EG.	ES,	FI.	GB.	GD.
							ID,										
		LC.	LK.	LR,	LS.	LT,	LU,	LV.	MA.	MD,	MG.	MK,	MN,	MW.	MX.	MZ.	NA.
		NG,	NI,	NO.	NZ.	OM,	PG,	PH.	PL.	PT,	RO.	RU,	sc.	SD,	SE.	SG.	sk.
		SL,	SM,	SY,	TJ,	TM,	TN,	TR.	TT.	TZ.	UA.	UG.	US.	UZ,	vc.	VN.	YU.
			ZM.						-								
	RW:	AT,	BE,	BĢ,	CH,	CY,	CZ,	DE,	DK.	EE.	ES.	FI.	FR.	GB.	GR.	HU.	IE.
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							GN,										
							NA,										
					RU,												
RIORITY	APP	LN.	INFO	• •					1	US 2	004-	6021	53 P		P 2	0040	817

US 2005-643708P

P 20050113

OTHER SOURCE(S): MARPAT 144:274265

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * AB The title compds. I (0 = II-IV; R1 = X-Z-O-R11; X = O, S or NR12; Z = haloelkylene or haloelkenylene; R2 = H, alkyl, haloelkyl, etc.; R3 = H, alkyl, alkenyl, etc.; R4 = H, alkyl, alkenyl, etc.; R5 = OH, elkoxy, alkylemino, etc.; or NR4R5 = ring containing 2-6 carbon atoms and optionally

nelly
one addnl. atom of N, S or O; R6, R7 = H, alkyl, alkenyl, etc.; W = N,
CR2; V = N, CR13; Y = N, CR14; R11 = alkyl, alkenyl, cycloalkyl, etc.;

H. alkyl; R13, R14 = H. alkyl, cycloalkyl, etc.; L = a direct bond or a linking chain of one or more members selected from C, N, O, S, etc.; n = 1-4), were prepared and claimed. E.g., a multi-step synthesis of V, starting from 3-chloro-2-hydrazinopyridine and di-Et maleate, was given. Compound V resulted in at least 80% mortality when tested against fall armyworm (Spodopters frugiperda). Also disclosed are compns. containing

compds. I and methods for controlling an invertebrate pest comprising contacting the invertebrate pest or its environment with a biol.

effective amount of a compound or a composition of the invention.

ANSWER 10 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 877876-91-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of novel anthranilamides useful for controlling

invertebrate

reprace
peets)
877876-91-0 CAPLUS
4H-3,1-Benzoxezine-6-carbonitrile, 2-[1-(3-chloro-2-pyridinyl)-3-[1,1,2-trifluoro-2-(trifluoromethoxy)ethoxy]-1H-pyrazol-5-yl]-8-methyl-4-oxo-(9C1) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

Preparation of pyrazoloyi anthranilamides as pesticides. Alig, Bernd; Pischer, Ruediger; Punke, Christian; Gesing, R. F. Ernst; Hense, Achim; Krueger, Bernd-Wieland; Loesel, Peter; Arnold, Christian Bayer Cropacience A.-G., Germany PCT Int. Appl., 77 pp. CODEN: PIXXD2 INVENTOR (S) : PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent German FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE WO 2006000336 WO 2006000336 20060105 A2 A3 20050616 WO 2005-EP6482 1000336
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100036 20061214 RW: DE 102004031100 PRIORITY APPLN. INFO.: OTHER SOURCE(S):

Preparation of pyrazoloyl anthranilamides as

L4 ANSWER 11 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:11014 CAPLUS DOCUMENT NUMBER: 144:108313
TITLE: Preparation

ANSWER 11 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Title compds. [I; A1, A2 = O, S; X1 = N, CR10; X2 = NR11, O, C(R11)2; R1

H. (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, alkylamino, alkylcarbonyl, etc.; R3 = H, R12, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; NR2R3 =

- H. R12. (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; NR2R3 - ma

to form a ring; R4 - H. alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, alkoxy, halo, cyano, etc.; R5, R8 - H, halo, (substituted) alkyl, haloalkyl, alkyl, etc.; R7 - H, alkyl, cycloalkyl, haloalkyl, alkyl, alkylthio, etc.; R1 - H, (substituted) alkyl, alkynyl, cycloalkyl; R12 - (substituted) alkylthio, alkylaulfenyl, haloalkylaulfenyl, hps, PhSO; R13 - amino, SH, SCN, trialkylsilyloxy, B(OR18)2, etc.; R18 - H, alkyl), were prepered Thue,
-chloro-8-methyl-4H-benzo[d][1,3]oxazin-2-yl)-1-(3-chloropyridin-2-yl)-1H-pyrazole-3-carboxaldehyde O-methyloxime (preparation given) was refluxed with isopropylamine in THF to give 1.57%
-chloropyridin-2-yl)-3-H-pyrazole-3-carboxylic acid (4-chloro-2-isopropylcarbamoyl-6-methyl)amide. The latter at 100 g/ha gave

100%

ANSWER 11 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 12 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2005:1314351 CAPLUS
DOCUMENT NUMBER: 144:51574
TITLE: Preparation of pyrazolylcarbony

144:51574
Preparation of pyrazolylcarbonyl anthranilamides as insacticides
Lahm, George Philip; Selby, Thomas Paul
E.I. Dupont De Nemours and Company, USA
PCT Int. Appl., 52 pp.
CODEN: PIXXD2
Patent INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: English

PAMILY ACC. NUM. COUNT: PATENT INFORMATION:

		FENT																
							-							• • • •		-		
	WO	2005	1185	52		A2		2005	1215		WO 2	005-	US 12	465		2	0050	412
	WO	2005	1185	52		A3		2006	0126									
									AZ,		BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	ĢΒ,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	ΚP,	KR,	KZ,
			LC.	LK,	LR,	LS.	LT.	LU.	LV,	MA.	MD,	MG.	MK,	MN,	MW,	MX,	MZ,	NA,
			NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC.	SD,	SE,	SG,	SK,	SL,
			SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UΑ,	UG,	US,	υz,	VC,	VN,	YU,	ZA,
			ZM,	ZW														
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	·ES,	PI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	BJ,	CF,	cc,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
						TD,												
	ΑÚ	2005	2503	28		A1		2005	1215		AU 2	005-	2503	28		2	0050	412
	CA	2561	369			A1		2005	1215		CA 2	005-	2561	369		2	0050	412
	EP	1751	112			A2		2007	0214		EP 2	005-	7795	80		2	0050	412
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	PI,	FR,	GΒ,	GR,	HU,	IE,
			IS.	IT,	LI.	LT.	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR		
PRIC	RIT	APP	LN.	INFO						1	US 2	004-	5618	13P		P 2	0040	413
																	0050	
											70 Z	uu5-	4214	700		~ 4	~~>0	444

OTHER SOURCE(S): CASREACT 144:51574: MARPAT 144:51574

(Continued)

ANSWER 12 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

871239-20-2 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[3-bromo-1-(2-chlorophenyl)-1H-pyrazol-5-yl]-6,8-dichloro- (9CI) (CA INDEX NAME)

ANSWER 12 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. I [R1= Me, Cl, Br or I; R2 = Cl, Br, I or CN; R3 = Cl, Br, CP3, OCH3CP3 or OCP2H; R4 = H, alkyl. alkenyl or alkynyl (each optionally substituted with CN or SMe); R5 = Ph substituted with 1-3 substituents selected from P, Cl, Br and Mel, useful for controlling an invertebrate pest, were prepared E.g., a multi-step synthesis of I [R1 = Me; R2 = CR; R3 = Br; R4 = iso-Pr; R5 = 2-ClC6H4], starting from 2-chlorophenylhydrazine.HCl and glyoxylic acid, was given. Also

are methods for controlling an invertebrate pest comprising contacting

invertebrate pest or its environment with a biol. effective amount of a compound I, an N-oxide thereof or a suitable salt of the compound (e.g.,

composition described herein). This invention also pertains to a

composition for controlling an invertebrate pest comprising a biol. effective amount of a compound I, an N-oxide thereof or a suitable sait of the compound and at

one addnl. component selected from the group consisting of a surfactant,

solid diluent and a liquid diluent.
871239-19-9P 871239-20-2P
RL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of pyrazolylcarbonyl anthranilamides as insecticides)
871239-19-9 CAPLUS
4H-3,1-Benzoxazine-6-carbonitrile, 2-[3-bromo-1-(2-chlorophenyl)-1Hpyrazol-5-yl]-8-methyl-4-oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 13 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
AUTHOR(S):
Lating receptor activators
Lahm, George P.; Selby, Thomas P.; Freudenberger,
John

H.; Stevenson, Thomas M.; Myers, Brian J.; Seburyamo, Gilles; Smith, Ben K.; Flexner, Lindsey; Clark, Christopher E.; Cordova, Daniel
DuPont Crop Protection, Stine-Haskell Research

CORPORATE SOURCE:

Center,

Newark, DE, 19711, USA

SOURCE:

Bioorganic 4 Medicinal Chemistry Letters (2005), 15(22), 4898-4906
CODEN: BMCLES; ISSN: 0960-894X

PUBLISHER:

Bisevier B.V.

DOCUMENT TYPE:
LANGUAGE:
CASREACT 144:1613
AB A novel class of anthranilic diamides has been discovered with exceptional insecticidal activities of a control of the con

prional inserticidal activity on a range of Lepidoptera. These compds. have been found to exhibit their action by release of intracellular Ca2+ stores mediated by the ryanodine receptor. The discovery, synthesis, structure-activity, and biol. results are presented. 438450-40-9P 500011-82-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (insecticidal activity of) 438450-40-9 CAPLUS 4H-3,1-Benzowazin-4-one, 6-chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

IT

500011-82-5 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrezo15-yl]-8-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 13 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 23 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

(Continued)

ANSWER 14 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AB The title anthranilamides, i.e.
N-(2-aminocarbonylphenyl)-1-(2-pyridyl)-1H-pyrazole-5-carboxamide derivs. represented by the general formula (I)

salts thereof (wherein R1 = halogeno, alkyl, haloalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxy, haloalkoxy, alkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, haloalkoxycarbonyl, (un)substituted phenoxycarbonyl, NGZ (HO; R2, R3 = haloalpoeno, alkyl, haloalkyl, alkoxy, haloalkoxy, cyano; A = Y-substituted alkyl (Y = C3-4 cycloalkyl orably)

haloalkoxy, cyano; A = Y-substituted siny; ...

optionally
substituted by ≥1 groups selected from halogeno, alkyl, and
haloalkyl; n = 0,1; q = 0-4; provided that R1 is F, Cl. Br, or Me
substituted at 2-position of the benzene ring and another R1 is halogeno
substituted at 4-position of the benzene ring; the 4-halogeno group is F
or Cl] are prepared They are useful as pesticides, in particular
insecticides, acaricides, nematocides, and parasiticides. Thus, 1.49 g
EEIN was slowly added dropwise to a solution of 0.8 g.
cyclopropylmethylamine
hydrochloride in 40 mL THF, stirred at room temperature for 30 min,
slowly

hydrochloride in 40 mL THF, stirred at room temperature for 30 min, 1ly
treated dropwise with a solution of 1 g 2-[1-(3-chloro-2-pyridyl)-3(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl-4H-3,1-benzoxazin-4-one in 10
mL THF, and refluxed for 4 h to give, after workup and silica gel
chromatog, 0.5s g N-[6-[[(cyclopropylmethyl)amino]carbonyl)-2methylphenyl]-1-(3-chloro-2-pyridyl)-3-(trifluoromethyl)-1H-pyrazole-5carboxamide (II). Il at 3.1 ppm controlled 2-nd to 3-rd instar larvae of
Spodoptera litura on cabbage leaves.
500011-82-5 500011-87-0 862995-89-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of anthranilamides as pesticides such as insecticides,
acaricides, nematorides, and parasiticides)
500011-82-5 CADLUS
4H-3,1-Benzoxazin-4-one, 2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)1H-pyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STA ACCESSION NUMBER: 2005:902883 CAPLUS DOCUMENT NUMBER: 143:229846 TITLE: Preparation of anthranilamides INVENTOR(S): Koyanagi, Toru; Morita, Masawul 143:229846
Preparation of anthranilamides as pesticides
Koyanagi, Toru; Morita, Masayuki; Nakamoto, Kenichi;
Hisamatsu, Akihiro
Ishihara Sangyo Kaisha, Ltd., Japan
PCT Int. Appl., 52 pp.
CODEN: PIXXD2

PATENT ASSIGNEE(S): SOURCE:

	CODEN: PIXXD2		
DOCUMENT TYPE:	Patent		
LANGUAGE:	Japanese		
FAMILY ACC. NUM. COUNT:			
PATENT INFORMATION:	•		
FAILNI INFORMATION:			
. PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2005077934	A1 20050825	WO 2005-JP2351	20050216
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH.
CN. CO. CR.	CU. CZ. DE. DK.	DM. DZ. EC. EE. EG.	ES. PI. GB. GD.
		IN, IS, JP, KE, KG.	
		MD, MG, MK, MN, MW,	
		RO, RU, SC, SD, SE,	
		UG. US. UZ. VC. VN.	
		NA. SD. SL. SZ. TZ.	
		TM, AT, BE, BG, CH,	
		IE, IS, IT, LT, LU,	
		CF, CG, CI, CM, GA,	
MR, NE, SN,			5.17 CQ; CII, III,
		JP 2005-33829	20050210
JP 2006131608	3 20060525	JP 2005-33830	20050210
All 2005212068	A1 20050825	AU 2005-212068	20050216
CA 2553715	31 20050825	CA 2005-2553715	20050216
ED 1717237	31 20050825	EP 2005-710251	20050216
		GB, GR, IT, LI, LU,	
		CY. AL. TR. BG. CZ.	
BA, HR, IS,		CI, AL, IR, BG, CZ,	EE, HO, PL, SK,
PRIORITY APPLN. INFO.:	10	JP 2004-41295	. 20040210
PRIORITI AFFEN. INFO.:		JF 2004-41295	A 20040218
		JP 2004-133722	
		JP 2004-133/22	A 20040428
		TD 2004 251502	
		JP 2004-261507	A 20040908
		JP 2004-295778	
		35 2004-295778	A 20041008

WO 2005-JP2351

MARPAT 143:229846

ANSWER 14 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

W 20050216

OTHER SOURCE(S):

RN 500011-87-0 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[3-bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5yll-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

862995-89-9 CAPLUS
4H-3,1-Benzoxazin-4-one, 8-bromo-2-(3-bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-yl]-6-chloro-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 62 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSMER 15 OF 79
ACCESSION NUMBER:
DOCUMENT TYPE:
DOCUMENT TYPE:
LANGUAGE:
Patent
LANGUAG DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: DATE APPLICATION NO.

20041216 AU 2004-244704 20040607
20041216 CA 2004-2525383 20040607
20060308 EP 2004-736195 20040607
ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
TR, BG, CZ, EE, HU, PL, SK
20060712 CN 2004-80015752 20040607
20061124 JP 2006-508134 20040607
20060306 NO 2006-91 20060106
20061116 US 2006-559322 20060366
DK 2003-840 A 20030606 DK 2003-843

DK 2003-844 A 20030606 WO 2004-DK388 W 20040607 OTHER SOURCE(S): MARPAT 142:38265

L4 ANSWER 16 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:713027 CAPLUS DOCUMENT NUMBER: 142:219453 DOCUMENT NUMBER: TITLE: 142:219453
Synthesis and biological properties of selected
2-aryl-4(3H)-quinazolinones
Lee, Eung Seok; Son, Jong Keun; Na, Young Hwa; Jahng, AUTHOR (S): Yurngdong College of Pharmacy, Yeungnam University, Kyongsan, 712-749, S. Korea Heterocyclic Communications (2004), 10(4-5), 325-330 CODEN: HCOMEX; ISSN: 0793-0283 Freund Publishing House Ltd. Yurngdong CORPORATE SOURCE: SOURCE: PUBLISHER: DOCUMENT TYPE: LANGUAGE:

English CASREACT 142:219453 OTHER SOURCE(S):

A series of 2-aryl-4(3H)quinazolinones I [Ar = Ph, 2-pyridyl, indol-2-yl, quinolin-2-yl] were prepared as parent systems of rutaecarpine and

luotonin
A and their biol. properties (cytotoxicity and COX-2 inhibitory activity)

were evaluated.

53904-12-4P

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and ammonolysis of; synthesis and biol. properties of

selected
2-aryl-4(JH)-quinazolinones)
RN 53904-12-4 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-(2-pyridinyl)- (9CI) (CA INDEX NAME)

THERE ARE 26 CITED REFERENCES AVAILABLE FOR

PODMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 15 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

$$\begin{pmatrix} X \\ A \\ A \\ T \\ Z \end{pmatrix} = \begin{pmatrix} R^1 \\ A \\ R^2 \\ T \\ Z \end{pmatrix} = \begin{pmatrix} X \\ Y \\ R^3 \\ 11 \end{pmatrix}$$

Title compds. I and II $[X = 0, S; Y = 0, S, NH (or N); Z = 0, NH (or N); W. Q. V. T = CH, CH2, S, N, O; A, B, C, D = <math>\{un\}$ saturated aromatic; R1-2

present) alk(en/yn)yl, cycloalkyl, etc.; R3 = (un)substituted (hetero)aryl) are prepared For instance, general procedures are described for the preparation of 2-phenylbenzo(d)[1,3]oxazin-4-one (III). III has

2 μM for stratum corneum chymotryptic enzyme (SCCE). I are useful for the treatment of skin diseases such as pruritus as well as cancer such as ovarian cancer. 57696-11-4P, 2-(Pyridin-4-yl)benzo[d][1,3]oxazin-4-one RL: PAC (Pharmacological activity), SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of (hetero)aromatic-fused oxazine, thiszine and related

(preparation of (hetero)aromatic-fused oxazine, thiazine and related derivs. as v8. as scce inhibitors) 57696-11-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(4-pyridinyl)- (9CI) {CA INDEX NAME}

L4 ANSWER 17 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004.648522 CAPLUS DOCUMENT NUMBER: 141:190786 141:190786
Preparation of cyano anthranilamide insecticides
Hughes, Kenneth Andrew: Lahm, George Philip: Selby,
Thomas Paul; Stevenson, Thomas Martin
E.I. Du Pont De Nemours and Company, USA
PCT Int. Appl., 63 pp.
CODEN: PIXXD2
Patent DOCUMENT NUMBER: TITLE: INVENTOR (S): PATENT ASSIGNEE (S) : DOCUMENT TYPE:

LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2004067528 20040812 A1 B1 WO 2004-US3568 20040121 WO 2004067528 2004067528 B1 20041007
N: AE, AG, AL, AM, AT, AU, AU, AC, CN, CO, CR, CU, C2, DE, DK, GE, GH, GM, HR, HU, ID, IL, LK, LR, LS, LT, LU, LV, MA, 2004207849 A1 20040812 A1 20040812 A1 20051130
R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO, MK, 2005000219 A 20051230 200406709 B1 20051230 2764895 B1 20061220 20041007 BA, BB, BG, BR, BW, BY, BZ, CA, CH, DM, DZ, EC, EE, EG, ES, FI, GB, GD, IN, IS, JP, KE, KG, KP, KR, KZ, LC, MD, MG, MK, NN, MW, MX, MZ, NA, NI AU 2004-2512422 20040121 EP 2004-704148 20040121 W: AE, AG, CN, CO, GE, GH, LK, LR, AU 2004207848 CA 2512242 EP 1599463 GB, GR, IT, LI, LU, NL, SE, MC, PT, CY, AL, TR, BG, CZ, EE, HU, SK MD 2005-219 20040121 BR 2004-6709 20040121 JP 2005-518229 20040121 MD 2005000219 BR 2004006709 JP 3764895 JP 2006515602 20060412 CN 1829707 EG 23536 JP 2006028159 JP 3770500 JP 2006290862 CN 2004-80002991 EG 2004-49 JP 2005-148184 20060906 20040121 20060202 20060426 20050520 JP 2005-148201 US 2005-540966 US 2003-443256P 20061026 20050520 A Al US 2006111403 PRIORITY APPLN. INFO.: P 20030128 JP 2005-518229 A3 20040121 WO 2004-US3568 W 20040121

OTHER SOURCE(S): MARPAT 141:190786 L4 ANSWER 17 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The title compds. {I; R1 = Me, C1, Br, P; R2 = P, C1, Br, haloalkyl or haloalkoxy; R3 = F, C1, Br, R4 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl, each optionally substituted with one substituent selected

from the areas accessed.

cted
from the group consisting of halo, CN, SMe S(0)Me, S(0)ZMe and OMe; R5 =
H, Me; R6 = H, F, Cl; R7 = H, F, Cl], useful for controlling an
invertebrate pest, were prepared E.g., a multi-step synthesis of
ound I

[R1 = Me; R2 = CF3; R3 = Cl; R4, R5 = H), was given. The compds. I were
tested in various biol. tests (data given). This invention also pertain
to a composition for controlling an invertebrate pest comprising a biol.
effective amount of a compound I, an N-oxide thereof or a suitable salt
he

effective amount of a compound I, an N-oxide thereof or a multiple of the compound I and at least one addnl. component selected from the group consisting of a surfactant, a solid diluent and a liquid diluent.

IT 50028-90-0P 716995-60-1P 736995-61-2P
716995-62-1P 736995-63-4P 736995-64-5P
716995-65-6P 736995-63-4P 736995-64-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or respent)
(preparation of cyano anthranilamide insecticides)
50028-90-0 CAPLUS
CN 4H-3,1-Benzoxezin-4-one, 2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-6-iodo-8-methyl- (9Cl) (CA INDEX NAME)

ANSWER 17 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

736995-63-4 CAPLUS
4H-3,1-Benzoxazin-4-one,
-bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5yl)-6-iodo-8-methyl- (9CI) (CA INDEX NAME)

RN 736995-64-5 CAPLUS
CN 4H-3,1-Benzoxazine-6-carbonitrile,
2-[3-bromo-1-(1-chloro-2-pyridinyl)-1Hpyrazol-5-yl]-8-methyl-4-oxo- (9C1) (CA INDEX NAME)

RN 736995-65-6 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 8-chloro-2-{3-chloro-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-yl]-6-iodo- (9CI) (CA INDEX NAME)

L4 ANSWER 17 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

736995-60-1 CAPLUS
4H-3,1-Benzoxazine-6-carbonitrile, 2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl-4-oxo-(9CI) (CA INDEX NAME)

736995-61-2 CAPLUS
4H-3,1-Benzoxazin-4-one,
-chloro-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5yl]-6-iodo-8-methyl- (9CI) (CA INDEX NAME)

RN 736995-62-3 CAPLUS
CN 4H-3,1-Benzoxazine-6-carbonitrile,
2-[3-chloro-1-(3-chloro-2-pyridinyl)-1Hpyrazol-5-yl]-8-methyl-4-oxo- [9CI) (CA INDEX NAME)

L4 ANSWER 17 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

736995-66-7 CAPLUS
4H-3,1-Benzoxazine-6-carbonitrile, 8-chloro-2-(3-chloro-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-yl]-4-oxo- (9CI) (CA INDEX NAME)

02/26/2007

L4 ANSWER 18 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:453211 CAPLUS
DOCUMENT NUMBER: 141:33541
INVENTOR(S): Assmann, Lutz; Kitagawa, Yoshinori; Shigyo, Takuma;
Oelgemoeller, Michael; Sawada, Haruko
Bayer Cropacience Aktiengesellschaft, Germany
PATENT ASSIGNEE(S): Bayer Cropacience Aktiengesellschaft, Germany
PCT Int. Appl., 50 pp.
CODEN: PIXXD2
PATENT ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

TENT	INFO	KMAT	ON:														
F	ATENT																
-						-									-		
	0 200	4046	140		A1		2004	0603	,	WO 2	003-	EP12	475		2	0031	108
	w:	AE,	AG,	AL,	AM,	AT,	λU,	AZ,	BA,	BB,	BG.	BR,	BW,	BY,	BZ,	CA,	CH
		CN,	. co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC.	EE,	EG,	ES,	FI,	ĢΒ,	GD
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	υz,	vc.	VN,	YU,	ZA,	ZM,	ZW	
	RW	: BW.	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK.	EE
		ES.	PI,	PR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE.	SI.	sĸ
		TR.	BF,	BJ,	CF.	CG,	CI,	CM,	GΑ,	GN,	GQ.	GW,	ML,	MR,	NE,	SN,	TD
J	P 200	41687	707		A		2004	0617		JP 2	002-	3363	29		2	0021	120
A	U 200	32880	12		A1		2004	0615		AU 2	003-	2880	12		2	0031	108
IORI	TY AP	PLN.	INFO	.:						JP 2	002-	3363	29	1	A 2	0021	120
									,	wn 2	003-	FD12	475			0031	108

OTHER SOURCE(S): MARPAT 141:23541

$$R_n$$

Title compds. (I; R = halo, alkyl, alkoxy, alkylthio, alkylsulfonyl, acylamino, Ph. PhO, CO2H, dialkylsulfamoyl, acylamino, etc.; adjacent

ANSWER 18 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

698390-92-0 CAPLUS 4H-3,1-Benzoxazin-4-one, 7-chloro-2-(3,4-dichloro-5-imothimzoly1)- (9CI) (CA INDEX NAME)

$$\stackrel{c_1}{\overbrace{\hspace{1cm}}}_{0} \stackrel{c_1}{\overbrace{\hspace{1cm}}}_{s-N}$$

698390-93-1 CAPLUS 4H-3,1-Benzoxazin-4-one, 6-chloro-2-(3,4-dichloro-5-isothiazoly1)- (9CI) (CA INDEX NAME)

698390-94-2 CAPLUS 4H-3,1-Benzoxazin-4-one, 5-chloro-2-(3,4-dichloro-5-isothiazolyl)- (9CI) (CA INDEX NAME)

Habte

698390-95-3 CAPLUS 4H-3,1-Benzoxazin-4-one, 6-bromo-2-(3,4-dichloro-5-isothiazolyl)- (9CI) (CA INDEX NAME)

ANSWER 18 0F 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pairs of R may form alkylene, alkenylene, alkylenedioxy, salkylenedioxy, salkylenedioxy, salkylenedioxy, salkylenedioxy, salkylenedioxy, groups; n = 0-4), were prepd. Thus, 2-(3,4-dichloroisothiazol-5-ylcarbonyleminol-5-bromobenzoic acid (prepn. given) was refluxed 2 h with Ac20 to give 2-(3,4-dichloroisothiazol-5-yl)-6-bromo-4H-oxo-3,1-benzoxazine. Numerous I at 500 ppm gave >80% control of Pyricularia oryzae on rice.
6983190-89-5F 598330-90-8F 698390-91-9P
6983190-92-0F 698390-93-1F 698390-91-9F
6983190-93-0F 698390-99-7F 698391-01-4P
698391-05-9F 698391-03-6F 698391-03-FP
698391-05-9F 698391-10-5FP
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation);

(Uses) (preparation of isothiazolylbenzoxazinones as agrochem. microbicides) 698390-69-5 CAPLUS (CA-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)- (9CI) (CA-4-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)- (9CI)

NAME)

698390-90-8 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)-8-methyl- (9CI) (CA INDEX NAME)

698390-91-9 CAPLUS 4H-3,1-BenZoxazin-4-one, 8-chloro-2-(3,4-dichloro-5-isothiazoly1)- (9CI) (CA INDEX NAME)

ANSWER 18 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

698390-96-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)-6-methyl- (9CI) (CA INDEX NAME)

698390-97-5 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)-5-methyl- (9CI) (CA INDEX NAME)

698390-98-6 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)-5-fluoro- (9CI) (CA INDEX NAME)

698390-99-7 CAPLUS 4H-3.1-Benzoxazin-4-one, 2-(3.4-dichloro-5-isothiazolyl)-6-methoxy- (9CI) (CA INDEX NAME)

02/26/2007

ANSWER 18 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

4H-3,1-Benzokazin-4-one, 6,8-dichloro-2-(3,4-dichloro-5-isothiazolyl)-(9C1) (CA INDEX NAME)

698391-02-5 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)-7-nitro- (9CI) (CA INDEX NAME)

698391-03-6 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-ieothiazolyl)-7-methyl- (9CI)
(CA INDEX NAME)

L4 ANSWER 18 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

698391-04-7 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)-6-iodo- (9CI) (CA INDEX NAME)

698391-06-9 CAPLUS

698391-07-0 CAPLUS 4H-3,1-Benzoxazin-4-one, 4-dichloro-5-isothiazoly1)-6,7,8-trimethoxy-(9CI) (CA INDEX NAME)

ANSWER 18 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CAPLUS 6,8-dibromo-2-(3,4-dichloro-5-isothiazoly1) -H-3,1-Benzoxazin-4-one, (9CI) (CA INDEX NAME)

698391-09-2 CAPLUS 4H-3, 1-Benzoxazin-4-one, 2-(3,4-dichloro-5-isothiazolyl)-8-methoxy- (9CI) (CA INDEX MAME)

L4 ANSWER 19 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:453202 CAPLUS DOCUMENT NUMBER: 141:23526 Novel Number:

141:23526

Novel pyrazole-based anthranilamide insecticides and their pyreparation, compositions, and use Hughes, Kenneth Andrew; Lahm, George Philip; Selby, Thomas Paul
E.I. Du Pont De Nemours and Company, USA PCT Int. Appl., 96 pp.
CODEN: PIXXD2
Patent Enqlish

INVENTOR (5):

PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. US 2005-529612 US 2002-426693P WO 2003-US36167 W 20031112

OTHER SOURCE(S): MARPAT 141:23526 L4 ANSWER 19 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The invention provides title compds. I and their N-oxides and suitable salts (wherein: Y, V = N or CR4s; W = N, CH, or CR6; R1 = H, (un) substituted alkyl, alkeynl, alkeynl or cycloalkyl, alkyl, alkeynl, alkoynl, alkoxycarbonyl, (di)alkylaminocarbonyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, (di)alkylamino, cycloalkylamino, alkoxycarbonyl, or alkylcarbonyl; R3 = H, G, (un) substituted alkyl, alkenyl, alkynyl or cycloalkyl; or NR2R3 = (un) substituted heterocyclic (N/O/S) ring; G = (un) substituted 5- or 6-membered non-aromatic carbo- or heterocyclic

ring;
RAa, RAb = H, various carbon and heteroat. substituents; R5 =
alk(en/yn)yl, various derivs. of OH, SH, and NH2; R6 =
(halo)alk(en/yn)yl,
OH and derivs. or thio analogs, halo, cyano, CO2H, (di)alkylamino,
(un)aubstituted Ph, PhCH2, PhCO, PhO, etc.; n = 0-4]. The invention also
pertains to compns. for controlling invertebrate pests, comprising a
biol. biol

effective amount of I, their N-oxides, or their agronomically or nonagronomically suitable salts, and at least one addnl. component selected from surfactants, solid diluents, and liquid diluents, and optionally further comprising an effective amount of at least one a biol. active compound or agent. Also disclosed are methods for rolline one addn1.

55% Et 1-(3-chloro-2-pyridinyl)-3-pyrazolidinone-5-carboxylate, which was oxidized to a dihydropyrazolone, saponified to an acid, cyclized with dichloroanthramilic acid to give a benzoxazinone, O-meeylated at the pyrazolone, and ring-opened with MeNH2, to give invention compound II.

test of larval Plutella xylostella on radish plants, II at 50 ppm (spray) reduced feeding damage by 80% or more. Compds. I were also effective against Spodoptera frugiperda, Myzus persicae, and Emposacs fabae. 697799-66-9P, 6,8-Dichloro-2-16-(1-G-chloro-2-pyridinyl)-3-[(methylsulfonyl)oxy]-1H-pyrazol-5-yl]-4H-3,1-benzoxazin-4-one

ANSWER 19 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
697799-69-2P, 6,8-Dichloro-2-[1-(2-chloro-2-pyridinyl)-3-(2propynyloxy)-1H-pyrazol-5-yl]-4H-3,1-benzoxazin-4-one
RL: RCT (Reactant) SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate: prepn. of novel pyrazole-based anthranilamide
insecticides)
697799-66-9 CAPLUS
4H-3,1-Benzoxazin-4-one, 6.8-dichloro-2-[1-(3-chloro-2-pyridinyl)-3[(methylsulfonyl)oxyl-1H-pyrazol-5-yl)- (9CI) (CA INDEX NAME)

697799-69-2 CAPLUS
4H-3,1-Benzoxazin-4-one, 6,8-dichloro-2-[1-(3-chloro-2-pyridinyl)-3-(2-propynyloxy)-1H-pyrazol-5-yll- (9CI) (CA INDEX NAME)

L4 ANSWER 20 OF 79 CAPLUS COPYRIGHT 2007 ACS On STN ACCESSION NUMBER: 2004:412903 CAPLUS DOCUMENT NUMBER: 140:423688

TITLE: Preparation of quinazolinone derivatives as calcilytics

calcilytics
Shcherbakova, Irina; Balandrin, Manuel; Fox, John;
Heaton, Milliam; Conklin, Rebecca; Papac, Damon
NFS Pharmaceuticals, Inc., USA
PCT Int. Appl., 74 pp.
CODEN: PIXXD2
Patent INVENTOR (S):

PATENT ASSIGNEE (S):

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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												2003-					0031	104
,	NO :	2004	0417	55		A3		2004	0708									
		W:	AΕ,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	, BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC.	EE,	ES,	PI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	, KG,	KP.	KR,	KZ,	LC,	LK,	LR,
			LS.	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN.	, MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL.	PT,	RO,	RU,	SD,	SĒ,	SG,	SK,	SL.	TJ,	TM.	TN,	TR,	TT,	TZ,	UA,
			UG.	US.	UZ,	VC.	VN,	YU.	ZA,	ZM,	ZW							
		RW:	BW.	GH.	GM.	KE,	LS.	MW.	MZ.	SD,	SL,	, SZ,	TZ.	UG,	ZM,	ZW.	AM.	AZ.
												, BG,						
			ES,	FI,	PR,	GB,	GR,	Hυ,	IE,	IT,	LU,	, MC,	NL,	PT,	RO,	SE,	SI,	SK,
			TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN.	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
TG																		
	CA 2	25023	302			A1		2004	0521		CA 2	2003-	2502	302		20	0031	104
,	NU 2	2003	29176	51		A1		2004	0607		AU :	2003-	2917	61		21	0031	104
E	EP 1	15582	360			A2		2005	0803	- 1	EP :	2003 -	7686	55		20	0031	104
		R:	AT,	BE,	CH,	DE,	DK,	ES.	PR,	GB,	GR.	IT,	LI.	LU,	NL,	SE,	MC.	PT,
			IE.	SI,	LT,	LV,	FI,	RO.	MK,	CY,	AL.	TR.	BG,	CZ,	EE,	HŲ,	SK	
	IN 1	17083	306			A		2005	1214		CN 2	2003-	8010	2626		21	0031	104
	IP :	2006	5123	15		T		2006	0413		JP 2	2004-	5504	82		21	0031	104
t	JS 2	2006	05234	15		A1		2006	0309	1	us a	2005-	5311	61		21	0050	412
PRIOR	TY	APPI	LN.	NFO	. :					1	us 2	2002-	4236	63 P	1	P 20	0021	104
										,	NO 2	2003-1	US35	162	,	W 21	0031	104

OTHER SOURCE(S): MARPAT 140:423688 ANSWER 20 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The title compds. I (R1, R2, R3 = H, halo, CN, CF3, OCF3, alkyl, alkoxy, etc.; R4 (optional) = H, halo, CN, CF3, OCF3, alkyl, alkoxy, etc.; X = C or N, R5 = H, alkyl, furyl, thienyl, stryl, pyridyl, (substituted)phenyl;

R6 = H, alkyl, or -(CH2)n-X1-R7; n= 0-2; X1 = O, CO, CHOH, alkyl, or a single bond; R7 = an aromatic group optionally substituted with 1-3 substituents selected from H, halo, CN, CF3, OCF3, alkyl, alkoxy, etc.] were prepared as calcium receptor antagoniate for the treatment of bone diseases. Thus, reaction of 2-phenyl-benzo(d)[1,3]oxazin-4-one (preparation given) with phenethylamine gave compound II. Methods to determine the biol.

biol.

11

activity of the compound of this invention were demonstrated. 57696-11-4, 2-Pyridin-4-yl-benzo[d][1,3]oxazin-4-one RL: RCT (Reactant): RACT (Reactant or reagent) (preparation of quinazolinone derivs. as calcilytics) 57696-11-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(4-pyridinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 21 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:333726 CAPLUS
DOCUMENT NUMBER: 140:339324
Preparation of anthranilamide derivatives for controlling invertebrate peats
Lahm, George Philip; Selby, Thomas Paul; Stevenson, Thomas Martin
PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA
SOURCE: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: PIXXD2
PAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE

WO 2003-US31677 W 20031001

OTHER SOURCE(S):

MARPAT 140:339324

ANSWER 21 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT :

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 21 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

$$(R^1) \bigcap_{N \in \mathbb{R}^3} \bigcup_{N \in \mathbb{R}^3} \bigcap_{R \in \mathbb{R}^3} \bigcap_{N \in \mathbb{R}^3} \bigcap_{M \in \mathbb{R}^3} \bigcap_{N \in \mathbb{R}^3$$

Title compds..I [wherein R = -U-A-V-B; U, V = independently (un)substituted alkylene; λ = 0, S(0)m, m = 0-2; B = trisubstituted

In the compact. I (un)substituted alkylene; A = 0, S(O)m, m = 0-2; B = trisubstituted silyl;

J = (un)substituted Ph, pyrazolyl, pyrrolyl, pyridinyl, pyrimidinyl; R1 = independently (cyclo)alkyl, alkenyl, alkenyl, haloalkylaulfinyl, benzyl, etc.; R2 = H, (un)substituted (cyclo)alkyl, alkylyl, alkynyl, benzyl, alkylamino, etc.; n = 0-4; and N-oxides or suitable salts thereof) were prepared as insecticides for controlling invertebrate peets. For example, reaction of 3-chloro-2(1H)-pyridinone hydrazone with distributed by the pyridinone of the distributed by the pyridingle of the distributed by the pyridingle of the distributed by the pyridinone of the distributed as the pyridingle of the distributed by the pyridingle of the distributed by the distributed by the pyridingle of the distributed by midstinon with [1-5].

showed very good to excellent levels of plant protection (20% or less feeding damage) against diamondback moth and fall armyworm. This invention also pertains to a composition comprising at least one compound I and

pund I and
at least one addnl. component selected from the group consisting of a
surfactant, a solid diluent and a liquid diluent.
500011-87-0P, 2-[3-Bromo-1-[3-chloro-2-pyridinyl)-1H-pyrazol-5-yl]6-chloro-8-methyl-4H-3,1-benzoxzin-4-one
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
[Peactant or reagent] (Reactant or reagent)
 (preparation of anthranilamide derivs. for controlling invertebrate

| (preparation of one-collection one-collection of one-collection of one-collection one-co

ACCESSION NUMBER:

ANSWER 22 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
SSION NUMBER: 2004:101149 CAPLUS
E: Method for preparing fused oxazinones by cyclocondensation of ortho-amino aromatic carboxylic acids with carboxylic acids with carboxylic acids
NTOR(S): Taylor, Eric Deguyon
ST ASSIGNEE(S): E.1. Du Pont de Nemoure and Company, USA
PCT Int. Appl., 80 pp.
CODEN: PIXXD2
MENT TYPE: Patent
LUGGE: English DOCUMENT NUMBER: TITLE:

INVENTOR (S): PATENT ASSIGNEE (S) :

SOURCE:

DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	PA:	TENT	NO.								APPL	ICAT	ION	NO.		בם	ATE	
	• • •	• • • • •																
	WO	2004	0114	47		A2		2004	0205		WO 2	003 -1	US23	821		2	0030	729
	WO	2004																
		W:	ΑE,	AG.	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			co,	CR,	Cυ,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ.	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO.	NZ,	OM.
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	sĸ,	SL.	SY,	TJ.	TM.	TN.
			TR,	TT,	TZ,	UA,	UG,	US.	υz,	VC,	VN,	Yυ,	ZA,	ZM.	ZW			
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ.	UG.	ZM.	ZW.	AM.	AZ.	BY.
			KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG.	CH,	CY.	CZ.	DE.	DK.	EE.	ES.
			FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC.	NL,	PT,	RO.	SE.	SI.	SK.	TR.
												GW,						
	ΑU	2003																
		1549																
												IT,						
												TR,						
	BR	2003	0122	41		A		2005	0712			002-	1224					720
	CN	1671 2006 2005	703			A		2005	0921		CN 2	003-	8182	02		2	0030	729
	JР	2006	5012	03		T		2006	0112		JP 2	004-	5242	04		2	0030	729
	US	2005	2157	85		A1		2005	0929	-	US 2	004-	5183	24		2	0041	215
PRIOR	RITY	APP	LN.	INFO	. :					1	US 2	002-	4003	52P	1	2	0020	731
										1	US 2	003-	4464	38P		2	0030	211
										1	WO 2	003-1	US23	821	1	1 2	030	729

OTHER SOURCE(S): MARPAT 140:146150

. STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT .

AB A method for preparing a fused oxazinone (I; J = an optionally substituted

tituted carbon moiety; K together with the two contiguous liking carbon atoms - each (un)aubstituted a fused Ph ring or a fused 5- or 6-membered heteroarom. ring] is disclosed in which (1) a carboxylic acid of formula J-CO2H is contacted with a sulfonyl chloride of formula LS(O)2Cl (L- each (un)substituted alkyl, haloalkyl, or Ph] in the presence of an optionally substituted pyridine compound, the nominal mole ratio of sulfonyl chloride

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02/26/2007

ANSWER 22 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) to carboxylic acid being from about 0.75 to 1.5; (2) the mixt. prepd. in (1) is contacted with an ortho-amino arom. carboxylic acid in the

of an optionally substituted pyridine compd., the nominal mole ratio of the ortho-amino arom. carboxylic acid to carboxylic acid (II; K = same as above) charged in (1) being from about 0.8 to 1.2; and (3) addnl.

onyl chloride is added to the mixt. prepd. in (2), the nominal mole ratio of addnl. sulfonyl chloride added in (3) to carboxylic acid charged in (1) being at least about 0.5. More specifically disclosed is a method for prepg. a compd. of formula (III) [X = N, CR6; Y = N, CR; Rl = H, R2 = H, Me; R3 = Cl-6 alkyl; R4 = Cl-4 alkyl,halo; R5 = H, Cl-4 alkyl, Cl-4 heloalkyl, halo; R6, R7 = H, Cl-3 alkyl, Cl-4 haloalkyl, halo; Cyano,

haloalkyl, halo; R6, R7 = H, Cl-4 alkyl, Cl-4 haloalkyl, halo, cyano, haloalkyl; R8 = H, Cl-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, C3-6 cycloalkyl, C1-4 haloalkyl, C2-4 haloalkynyl, C2-6 halocycloalkyl, halogen, cyano, NO2, C1-4 alkoxy, C1-4 haloalkynyl, C3-6 lakylthin, C1-4 alkyllelifonyl, C1-4 alkyllelifonyl, C1-4 alkyllelifonyl, C1-4 alkyllelifonyl, C1-6 diskylamino, C2-8 diskylamino, C3-6 cycloalkylamino, (C1-4 alkyl) (C3-6 cycloalkyl)amino, ctc.; R9 - CF3, OCF3, OCH82-2, OCH32F3, S(0)pCF3, S(0)pCH82, halo; p = 0-2] using a compd. of formula (IV; R1-R5 = same as above; R7-R9 = same as above; X, Y = same as above that is characterized by prept, the fused oxazinone IV by the method above, using a compd. of the formula LS(0)2C1 as the sulfonyl chloride, a compd. of formula (VI) (R7-R9 = same as above) as the carboxylic acid, and a compd. of formula (VI) (R7-R9 = same as above) as the ortho-amino arom. carboxylic acid.
S00011-83-6P, 6-Chloro-2-(3-chloro-1-3-chloro-2-pyridinyl)-IH-pyrazol-5-yll-8-methyl-4H-3, 1-benzoxazin-4-one 500011-87-0P,

2-[3-Bromo-1-(3-chloro-2-pyridiny])-1H-pyrazol-5-yl]-6-chloro-8-methyl-4H3,1-benzoxazin-4-one 652380-05-7P, 2-[3-Bromo-1-(3,4-dichloro-2pyridinyl)-1H-pyrazol-5-yl]-6-chloro-8-methyl-4H-3,1-benzoxazin-4-one
652980-06-8P, 2-[3-Bromo-1-(3,6-dichloro-2-pyridinyl)-1H-pyrazol-5yl]-6-chloro-8-methyl-4H-3,1-benzoxazin-4-one 652980-09-1P,
2-[3-Bromo-1-(3-chloro-1-oxido-2-pyridinyl)-1H-pyrazol-5-yl]-6-chloro-8methyl-4H-3,1-benzoxazin-4-one
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of fused oxazinones by cyclocondensation of ortho-amino

aromatic
carboxylic acids with carboxylic acids)
RN 500011-83-6 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
6-chloro-2-[9-chloro-1-(3-chloro-2-pyridinyl)-1Hpyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

ANSWER 22 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

652980-09-1 CAPLUS
4H-3,1-8enzoxszin-4-one, 2-[3-bromo-1-(3-chloro-1-oxido-2-pyridinyl)-1Hpyrazol-5-yl]-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

ANSWER 22 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 500011-87-0 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[3-bromo-1-[3-chloro-2-pyridinyl)-1H-pyrazol-5yl]-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

652980-05-7 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-bromo-1-(3,4-dichloro-2-pyridinyl)-1Hpyrazol-5-yll-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

652980-06-8 CAPLUS
4H-3, 1-Benzoxazin-4-one, 2-{3-bromo-1-{3,6-dichloro-2-pyridinyl}-1H-pyrazot-5-yll-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

ANSWER 23 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 2003:412763 CAPLUS MENT NUMBER: 139:197419

ACCESSION NUMBER: DOCUMENT NUMBER:

Reactions of some (arylhydrazono)furanones with amino acids and malononitrile TITLE:

AUTHOR (S):

CORPORATE SOURCE:

acids and malononitrile El-Kousy, Salah M.; Hashem, Ahmed I.; El-Torgoman, Abdel Moneim; Salama, Gamal M. Faculty of Science, Minufiya University, Cairo, Egypt Afinidad (2003), 60(503), 61-64 CODEN: AFINAE; ISSN: 0001-9704 Asociacion de Quimicos del Instituto Quimico de

PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE

English CASREACT 139:197419 OTHER SOURCE(S):

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Reaction of (arylhydrazono)furanones I (R = H, Cl; Rl = H, Me, Cl, OMe) with glycine in AcOH gave (pyrazolylcarbonyl)glycines II (same R, Rl).

were converted to

were converted to

4-arylidene-2-(1,5-diarylpyrazol-3-yl)-2-oxazolin-5-ones

III by reaction with benzaldehyde in acetic anhydride. I were rearranged
with anthranilic acid in the presence of acetic acid to afford
N-(1,5-diarylpyrazol-3-ylcarbonyl)anthranilic acids. These anthranilic
acids could be cyclized with acetic anhydride to give
pyrazolylbenzoxazinones (IV). Malononitrile in dioxane containing aodium
metal rearranged I to (pyrazolylcarbonyl)malononitriles. Et cyanoacetate
did not react with I but the basic medium of the reaction converted I to
pyrazolcarboxylic acids.

IT 583825-78-9 P 583825-79-09 583825-80-3P

583825-81-4P 583825-82-5P
RL: SPN (Synthetic preparation); PREP (Preparation)

Page 2-14 301043-84-54 RL: SPN (Synthetic preparation); PREP (Preparation) (pyrazole deriva. via reaction of (arylhydrazono)furanones with amino acids, malononitrile, and Et cyanoacetate) 583825-78-9 CAPUUS

4H-3,1-Benzoxazin-4-one, 2-(1,5-diphenyl-1H-pyrazol-3-yl)- (9CI) (CA INDEX NAME)

583825-79-0 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[1-(4-methylphenyl)-5-phenyl-1H-pyrazol-3-yl]-(9CI) (CA INDEX NAME) ANSWER 23 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

583825-80-3 CAPLUS 4H-3,1-Benzoxazin-4-one, -(4-methoxyphenyl)-5-phenyl-1H-pyrazol-3-yl}-(9CI) (CA INDEX NAME)

583825-82-5 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[5-(4-chlorophenyl)-1-(4-methylphenyl)-1H-pyrazol-3-yl]- [9CI] (CA INDEX NAME)

L4 ANSWER 24 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003;261833 CAPLUS
DOCUMENT NUMBER: 138:287669
TITLE: Preparation of pyrazolylcarbonyl pyridinyl anthranilamides as arthropodicides
INVENTOR(S): 2immerman, William Thomas
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PIXD2
DOCUMENT TYPE: PATENT INFORMATION: 1
PATENT INFORMATION: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. KIND DATE ER 2002012695 CN 1556806 JP 2005505576 US 2004186141 US 7179824 IN 2004MN00089 IN 2004-MN89 US 2001-324011P PRIORITY APPLN. INFO.:

WO 2002-US28274

W 20020906

OTHER SOURCE(S): MARPAT 138:287669 ANSWER 23 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 24 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AB Title compds. [1, Rl. R2 = H. slkyl, slkenyl, alkynyl, cycloalkyl, haloalkenyl, haloalkenyl, haloalkenyl, halo, cyano, slkoxy, haloalkoxy, alkyithio, alkylsulfonyl, trialkylsilyl, etc.; R3 = H. slkyl, haloalkoxy, haloalkoxy, alkyithio, alkylsulfinyl, haloalkyl, haloalkyl, haloalkyl, haloalkyl, haloalkyl, alkyl, alkenyl, alkynyl, cycloalkyl; R5 = H. slkyl, alkenyl, alkynyl, cycloalkyl; R5 = H. slkyl, alkenyl, alkynyl, cycloalkyl; R5 = H. slkyl, alkenyl, alkynyl, cycloalkyl, haloalkenyl, haloalkenyl, haloaycloalkyl, halo, cyano, CO3H, CON12, NO2, OH, slkoxy, haloalkoxy, slkylthio, alkylsulfinyl, alkylsulfonyl, slkylamino, slkylcarbonyl, alkoxycarbonyl, trialkylsilyl, etc.], were prepared Thus,
1-(3-chloro-2-pyridinyl)-3-trifluoromethyl-1H-pyrazole-5-carboxylic acid (preparation given) was stirred with (COC1)2 and

cat. DMF in CH2Cl2 to give crude acid chloride, which was refluxed 3 h with 8-methyl-2H-3,1-benzoxazine-2,4(1H)-dione (preparation given) and

N-(3-chloro-2-pyridinyl)-N-[2-methyl-6-{[((1-methylethyl)amino]carbonyl]phe nyl]-5-trifluoromethyl-1H-pyrazole-1-carboxamide. The latter at 250 ppm on radishes preinfested with Plutella xylostella gave \$10% feeding damage.

IT 500011-82-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of pyrazolylcarbonyl pyridinyl anthranilamides as arthropodicides) RN 500011-82-5 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-8-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 24 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 25 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2003:242097 CAPLUS DOCUMENT NUMBER: 138:267201
TITLE: Pesticidal compositions for con-138:367301
Pesticidal compositions for coating plant propagation material containing anthranilamides
Berger, Richard Alan; Plexner, John Lindsey
E. I. Du Pont de Nemours & Co., USA
PCT Int. Appl., 147 pp.
CODEN: PIXXD2
Patent INVENTOR (S):
PATENT ASSIGNEE (S):
SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English PATENT NO. KIND DATE APPLICATION NO. DATE B2 A2 A A C2 HU 2004-1893 NZ 2002-532269 CN 2002-818578 RU 2004-111986 ZA 2004-413 US 2004-485125 IN 2005-MN443 20020910 20020910 20020910 20020910 20040120 20040126 20050517 20051028 20051228 20070127 20050120 20041021 RU 2292138 ZA 2004000413 US 2004209923 IN 2005MN00443 PRIORITY APPLN. INFO.: US 2001-323941P P 20010921 WO 2002-US30302 W 20020910

OTHER SOURCE(S):

MARPAT 138:267201

ANSWER 25 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compde. I (Markuah included).

uded), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers.

insecticidal

rticidal macrocyclic lactones, y-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or

leaf

cutting.
438450-40-9P, 6-Chloro-2-[1-(3-chloro-2-pyridiny1)-3-(trifluoromethy1)-1H-pyrazo1-5-y1]-8-methy1-4H-3,1-benzoxazin-4-one
500011-82-5P 500011-83-6P 500011-87-0P ΙT

SUDULITYS-3F RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT RL: RCT (Reactant): SPN (Synthetic preparation); FREF (Freparation) (Reactant or reagent) (preparation of anthranilamide compds. as pesticides for plant propagation material)
RN 438450-40-9 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 6-chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl- (SCI) (CA INDEX NAME)

ANSWER 25 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

500011-82-5 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-{1-{3-chloro-2-pyridinyl}-3-{trifluoromethyl}-1h-pyrazol-5-ył}-8-methyl- (9CI) (CA INDEX NAME)

RN 500011-83-6 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
6-chloro-2-[-3-chloro-1-(3-chloro-2-pyridinyl)-1Hpyrazol-5-yl)-8-methyl- (9Cl) (CA INDEX NAME)

500011-87-0 CAPLUS
4H-3,1-Benzoxazin-4-one,
-bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5yll-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

L4 ANSWER 25 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

500011-98-3 CAPLUS 4H-3,1-Benzoxazin-4-one, 6-chloro-2-[1-(3-chloro-2-pyridinyl)-3-(2,2,2-trifluoroethoxy)-1H-pyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 26 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The title compds. [I; A, B = O, S; X = N, CR10; Y = N, CH; R1 = H, alkyl, cycloalkyl, etc.; R2 = alkyl, alkenyl, cycloalkyl, etc.; R3 = H, alkyl, alkenyl, etc.; NR2R3 = (un)substituted ring optionally containing addnl. heteroatom; R4 = alkyl, haloalkyl, CN, etc.; R5, R8 = H, alkyl, haloalkyl, etc.; R7 = H, alkyl, haloalkyl, etc.; R9 = CF3, OCF3, OCF42, etc.; R10 = H, alkyl, haloalkyl, etc.], useful for controlling an invertebrate peat, were prepared E.g., a 3-step synthesis of I [A, B = O; X = CH; Y = N; R1 = ...

were prepared E.g., a 3-step synthesis of I (A, B = U; X = CH; I = A;

H; R2 = iso-Pr; R3 = H; R4 = Me; R5 = H; R7 = 2-(CH2OH); R8 = H; R9 =

CP3], starting from 1-[2-(methoxycarbonyl)phenyl]-3-trifluoromethyl-1Hpyrazole-5-carboxylic acid and 2-amino-3-methylbenzoic acid, which
provided excellent levels of plant protection (20% or less damage) in

biol. tests, was given.

IT 500028-90-0P 500028-92-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or respent)

(preparation of substituted anthranilamides for controlling
invertebrate

pests)

N 500028-90-0 CAPLUS

CN 4H-3,1-Benzoxazin-4-one, 2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)
1H-pyrazol-5-yl]-6-iodo-8-methyl- (9CI) (CA INDEX NAME)

S00028-92-2 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl-6-nitro- (SCI) (CA INDEX NAME)

L4 ANSWER 26 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2003:154408 CAPLUS COPURENT NUMBER: 138:205054

DOCUMENT NUMBER: TITLE:

INVENTOR (S) :

138:205054
Preparation of substituted anthranilamides for controlling invertebrate pests
Finkelstein, Bruce Lawrence; Lahm, George Philip; McCann, Stephen Prederick; Song, Ying; Stevenson, Thomas Martin
E. I. Du Pont de Nemours & Co., USA
PCT Int. Appl., 105 pp.
CODEN: PIXXD2
Patent
English
1

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

PAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	FENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
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WO	200	30162	84		A1		2003	0227		WO 2	002-	US26	960		2	0020	813
	₩:	AE.	AG.	AL.	AM.	AT.	AU.	AZ.	BA.	BB,	BG.	BR,	BY,	BZ.	CA,	CH.	CN.
		co.	CR.	CU.	CZ.	DE.	DK.	DM.	DZ.	EC.	EE.	ES.	PI,	GB,	GD.	GE.	GH.
		GM.	HR,	HU,	ID.	IL.	IN.	IS.	JP.	KE.	KG.	KP.	KR,	KZ.	LC.	LK.	LR.
		LS.	LT,	LU.	LV.	MA.	MD.	MG.	MK.	MN.	MW.	MX.	MZ.	NO.	NZ.	OM.	PH.
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3.5	200	22033	84		•		2005	0203		JP 2	003-	2214	10			0020	013
																0020	B13
IN	200	LMNO	027		A		2005	0429		IN 2	004-	MN27			2	0040	112
US	2009	52828	168		Al		2005	1222		US 2	004 -	4863	12		2	0040	722
			INFO								001-						
 										-							

WO 2002-US26960

W 20020813

OTHER SOURCE(S): MARPAT 138:205054

ANSWER 26 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

REFERENCE COUNT:

FORMAT

L4 ANSMER 27 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
1171LE:
LAWYOTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:

ACAPLUS COPYRIGHT 2007 ACS on STN
2003:154155 CAPLUS
118:200332
Archropodicidal anthranilamides
Lahm, George Philip; Selby, Thomae Paul; Stevenson,
Thomas Martin
CODEN: PIXXD2
DOCUMENT TYPE:

Patent
Patent
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Patent
Patent

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. PATENT NO. DATE KIND A1, AM, CU, CZ, LU, LV, k, M, CU, CZ, LU, LV, k, RU, S US, UZ, V, CE, LS, M, TR, BF D, TG A B A1 A1 DE, DK, LV, FI, A 2 T S B2 C DATE APPLICATION NO. DATE

20030237 WO 2003-US25615 PS. DZ. CA, CH, CN, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, MD, MG, MK, MN, MM, MX, MZ, NO, NZ, OM, PH, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, VN, YU, ZA, ZM, ZM

MZ, SD, SL, SZ, TZ, UG, ZM, ZM, AT, BE, BG, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, BJ, CP, CG, CI, CM, GA, GN, GO, GM, ML, MR, WO 2003015519 2003015519

W: AE, AG, AL,
CO, CR, CU,
GM, HR, HU,
LS, LT, LU,
PL, PT, RO,
UA, UG, US,
RW: GH, GM, KE,
CH, CY, CZ,
PT, SE, SK,
NE, SN, TD, , BJ, CP, CG, CI, CM, GA, GN, GQ, GW, ML, MR, 20050704 EG 2002-893 20020810 20050101 TM 2002-91118100 20020812 20040812 EP 2002-2454485 20020813 20040512 EP 2002-2454485 20020813 .ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, RQ, MK, CY, AL, TR, BG, CZ, EE, SK 20040803 BR 2002-12023 20020813 20041224 JP 2003-520290 20020813 20050291 ZA 2004-13 20020813 20050803 ZA 2004-13 20020813 20050803 ZA 2004-13 20020813 20050803 CA 2004-13 20020813 2005080 CR 0202-815924 20020813 2005092 RU 2004-19505 20020813 20060920 RU 2004-107505 20020813 20070129 HU 2004-675 20020813 20050931 ZA 2004-69158 20040931 NE, SN, TD, EQ 23419
TW 225774
CA 2454485
EP 1416797
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ZA 2004000031
ZA 2004000031
CN 1678192
RU 2283840
RU 202600675 NZ 2002-530443 ZA 2004-33 ZA 2004-34 CN 2002-815924 RU 2004-107505 HU 2006-675 ZA 2003-9911 US 2004-483168 200600675 2003009911 ZA US 2004198984 20041007 20050217 20040107 JP 2005041880 JP 2004-258923 US 2001-311919P 20040906 PRIORITY APPLN. INFO.: US 2001-324128P P 20010921 US 2002-369661P P 20020402 JP 2003-520290 A3 20020813

WO 2002-US25615

W 20020813

OTHER SOURCE(S): MARPAT 138:200332

L4 ANSWER 27 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN CN 4K-3,1-Benzoxazin-4-one, 6-chloro-2-[3-chloro-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5-yll-8-mechyl- (9CI) (CA INDEX NAME) (Continued)

RN 500011-87-0 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[3-bromo-1-(3-chloro-2-pyridinyl)-1H-pyrazol-5yl]-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

500011-98-3 CAPLUS 4N-3,1-Benzoxazin-4-one, 6-chloro-2-[1-(3-chloro-2-pyridiny1)-3-(2,2,2-trifluoroethoxy)-1H-pyrazol-5-y1]-8-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

PORMAT Habte ANSWER 27 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Anthranilamides I (Markush included), their N-oxides and agriculturally suitable salts are prepared as arthropodicides for controlling invertebrate

rebrate
peats. Arthropodicidal compns. containing anthranilamides I may further
include addnl. biol. active compds. or agents selected from
arthropodicides of the group consisting of pyrethroids, carbamates,
neonicotinoids, neuronal sodium channel blockers, insecticidal

macrocyclic
lactones, y-aminobutyric acid (GABA) antagonists, insecticidal
ureas, and juvenile hormone mimics. Bacillus thuringiensis sp. aizawai,

thuringiensis sp. kurstaki, B. thuringiensis delta endotoxin, baculoviruses, and entomopathogenic bacteria, viruses and fungi. 438450-40-99, 6-Chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl-4H-3,1-benzoxazin-4-one 500011-83-6P 500011-87-0P 500011-93-9P S00011-83-6P 500011-87-0P 500011-93-9P REP (Preparation); RACT (Reactant) SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or resgent) (preparation of arthropodicidal anthranilamide) 438450-40-9 CAPLUS 4H-3,1-Benzoxazin-4-one, 6-chloro-2-(1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

500011-83-6 CAPLUS

ANSWER 27 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 28 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:154154 CAPLUS
DOCUMENT NUMBER: 138:200331
TITLE: Method for controlling particular insect peets by applying anthranilamide compounds
LAHM, George Philip: McCann, Stephen Prederick; INVENTOR(S): Patel,

Kanu Maganbhai; Selby, Thomas Paul; Stevenson, Thomas Martin
E. I. Du Pont de Nemours & Co., USA
PCT Int. Appl., 150 pp.
CODEN: PIXXD2
Patent
English
4

PATENT ASSIGNEE(S): SOURCE:

PATENT NO. KIND DATE APPLICATION NO. DATE

MO 2003015518 A1 20030227 WO 2002-US35613 20020813

M: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, PI, GB, GD, GE, GK, GM, KR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, IT, LU, LV, MA, MD, MG, MK, MM, MM, MM, MX, MZ, ND, NZ, CM, PK, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 2A, ZM, ZM

RW: GM, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, PI, FR, GB, GR, IE, IT, LU, NC, NL, PT, SE, SK, TR, BP, BJ, CT, CG, CI, CM, GA, GN, GQ, GM, ML, MR, NS, MZ, SD, SL, SG, ST, ST, ST, TD, TD

CA 2454302 A1 20030227 CA 2002-752809 20020813

ER: AT, BE, CM, DE, DK, ES, FR, GB, GR, IT, LL, NL, SE, MC, PT, IS, SI, IT, LU, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK, ML, TD, TD, TD

CN 1541063 A2 20040928 HU 2004-1043 20020813

BR 2002012187 A2 20040928 HU 2004-1043 20020813

JP 1689817 B2 20050831

ZA 2004000034 A 20050803 ZA 2004-34 20020813

RU 2262231 C1 20051020 RU 2004-107513 20020813

RU 2262231 C1 20051020 RU 2004-107513 20020813

RU 2262231 C1 200500803 ZA 2004-34 20020813

RU 2262231 C1 200500207 US 2004-253923 20020813

RU 2262231 C1 20050021 ZA 2003-9911 20020813

PRIORITY APPLN. INFO: US 2001-31213P P 20010921

US 2001-324173P US 2001-324128P

US 2002-369661P

ANSWER 28 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

500011-82-5 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-HP-pyrazol-5-yl)-8-methyl- (SCI) (CA INDEX NAME)

500011-83-6 CAPLUS
4H-3,1-Benzoxazin-4-one,
loro-2-(3-chloro-1-(3-chloro-2-pyridinyl)-1Hpyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

500011-87-0 CAPLUS
4H-3,1-Benzoxazin-4-one,
bromon-1-(3-chloro-2-pyridinyl)-1H-pyrazo1-5yl)-6-chloro-8-methyl- (9CI) (CA INDEX NAME)

ANSWER 28 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) WO 2002-US25613 W 20020813

OTHER SOURCE(S): MARPAT 138:20033:

AB Anthranilamide compds. I (Markush included), N-oxides or an agriculturally suitable salts thereof are prepared as insecticides for controlling lepidopteran, homopteran, hemipteran, thysanopteran and coleopteran

pests. Insecticidal composition containing anthranilamide compds. I may further

pests. Insecticidal composition containing anthranilamide compds. I may her comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, y-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics.

438450-40-9P, 6-Chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl-4H-3,1-benzoxazin-4-one 500011-82-5P 500011-83-6P 500011-87-0P 500011-83-5P 500011-83-6P 500011-87-0P 500011-89-3P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) [preparation of anthranilamide compds. as insecticides) 438450-40-9 CAPLUS 4H-3,1-Benzoxazin-4-one, 6-chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl- (SCI) (CA INDEX NAME)

ANSWER 28 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

500011-98-3 CAPLUS
4H-3,1-Benzoxazin-4-one, 6-chloro-2-(1-(3-chloro-2-pyridinyl)-3-(2,2,2-trifluoroethoxy)-1H-pyrazol-5-yl)-8-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REPERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 29 OP 79 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2003:76617 CAPLUS
TITLE: 138:131087 New use
INVENTOR(S): SOURCE: Cancer Research Technology Limited, UK
PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION: PATENT INCORACTION:

MO 2003007955 A2 20030130 WO 2002-GB3342 20020722

WO 2003007955 A2 20030130 WO 2002-GB3342 20020722

WI AE, AG, AL, AM, AT AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LK, LY, LU, LV, MA, MD, MG, MK, MN, MM, MK, ND, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VM, YU, ZA, ZM

RM: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZM, AA, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SS, SK, TR, BP, BJ, CP, CG, CI, CM, GA, GN, GQ, GM, ML, MR, MS, SN, TD, TO

PRIORITY APPLIN. INFO::

US 2001-306679P P 20010720 OTHER SOURCE(S): MARPAT 138:131087

AB The present invention provides the use of a low mol: weight mammalian AP endonuclease inhibitor for the preparation of a medicament for the treatment of cancer. Markushes included.

1 218457-40-0 491861-59-7 491861-68-8

491861-78-0

RL: PAC (Pharmacological activity); BIOL (Biological study)
(low mol. weight mammalian AP endonuclease inhibitors as antitumor agents)

8N 218457-40-0 CAPLUS
CN 4H-3,1-Benzoxszin-4-one,
2-(3-(2,6-dichlorophenyl)-5-methyl-4-isoxazolyl)-5-fluoro- (SCI) (CA INDEX NAME)

ANSWER 29 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ANSWER 29 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

491861-59-7 CAPLUS 4H-3,1-Benzoxazin-4-one, 7-chloro-2-(5-methyl-3-phenyl-4-isoxazolyl)-(9CT) (CA INDEX NAME)

491861-68-8 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(2-chlorophenyl)-5-methyl-4-isoxazolyl]-6-iodo- (9CI) (CA INDEX NAME)

491861-78-0 CAPLUS 4H-3,1-Benzoxazin-4-one, 6-methyl-2-(5-methyl-3-phenyl-4-isoxazolyl)-(9CI) (CA INDEX NAME)

L4 ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:22872 CAPLUS
100:32872 CAPLUS
118:89816
Preparation of pyridine ring-containing benzoxazinone derivatives for treatment of viral infections
INVENTOR(S): Takahashi, Wataru; Watanabe, Naoto; Saito, Yasuyoshi
Asahi Kasei Kabushiki Kaisha, Japan
PCT Int. Appl., 104 pp.
CODE: PIXXD2
DOCUMENT TYPE: Patent
Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	ENT																
															-		
WO	2003	0025	58		A1		2003	0109	- 1	WO 2	002-	JP57	95		2	0020	611
	W:	AE,	AG,	AL,	AM,	AT,	ΑU,	AZ.	BA,	BB.	BG.	BR.	BY.	BZ.	CA.	CH.	CN,
							DK,										
							IN,										
							MD.										
							SE.										
							YU.										
		TJ.															
	RW:	GH.	GM.	KE.	LS.	MW.	MZ,	SD.	SL.	SZ.	TZ.	UG.	ZM.	ZW.	AT.	BE.	CH.
							FR,										
							CM.										
EP	1403																
							ES.										
							RO.										
US	2004											4804	51		2	0031	212
	APP																
													-		. •		
															4 2		

WO 2002-JP5795

W 20020611

OTHER SOURCE(S): MARPAT 138:89816

The title compds. I [R1, R2 = H, alkyl, etc.; or RiCR2 = cycloalkyl; A = (CM2)n; n = 0 or 1; R3 = H, alkyl, etc.; R4 = H, alkyl, alkenyl, etc.; R5 = alkylene; or NRR4S = heterocyclyl; R6 = H, halo, etc.] are prepared I have excellent protease inhibitory activity. I are useful in the treatment of viral infectious diseases, in particular herpeavirus . infections. Compds. of this invention in vitro showed EC90 values of 3.2 µM to > 12 µM against HSV-1.
484010-49-3P 484010-50-6P 484010-51-7P

PRI

ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
484010-52-8P 484010-53-9P 484010-54-0P
484010-55-1P 484010-55-3P 484010-68-6P
484010-64-4P 484010-67-5P 484010-68-6P
484010-69-7P 484010-70-0P 484010-71-1P
484010-72-2P 484010-73-3P 484010-74-4P
484010-72-2P 484010-76-6P 484010-77-7P
484010-73-8P 484010-79-9P
484010-78-6P 484010-79-9P
48-PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (Uses)
(prepn. of pyridine ring-contg. benzoxazinone derivs. for treatment of viral infections)
484010-49-3 CAPUUS
Carbamic acid, [5-methyl-4-oxo-2-[[2S]-2-[[[2-pyridinylmethyl]amino]carbonyl]-1-pyrrolidinyl]-4H-J,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-50-6 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-[(2S)-2-[[(3-pyridinylmethyl)amino]carbonyl]-1-pyrrolidinyl]-4H-3,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-51-7 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-[(2s)-2-[[(4-pyridinylmethyl)amino]carbonyl]-1-pyrrolidinyl]-4H-3,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

484010-54-0 CAPLUS Carbamic acid, [5-methyl-2-[(2S)-2-[[methyl[2-(2-

pyridinyl)ethyl)amino|carbonyl]-1-pyrrolidinyl]-4-oxo-4H-3,1-benzoxazin-6yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-55-1 CAPLUS Carbamic acid, (5-methyl-2-[(2S)-2-[[methyl[2-(3-

pyridinyl)ethyl]amino)carbonyl)-1-pyrrolidinyl]-4-oxo-4H-3,1-benzoxazin-6-yl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-56-2 CAPLUS Carbamic acid, [5-methyl-2-[{2S}-2-[[methyl[2-(4-

pyridinyl)ethyl]amino]carbonyl]-1-pyrrolidinyl]-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

484010-65-3 CAPLUS Carbamic acid, [5-methyl-4-oxo-2-[(2S)-2-[[(2-

Habte

ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN L4 ANSWER 30 07 ... Absolute stereochemistry. (Continued)

484010-52-8 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-[(2S)-2-[[[2-{2-pyridinyl]-thyl]amino]carbonyl]-1-pyrrolidinyl]-4H-3,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-53-9 CAPLUS Carbamic acid, [5-methyl-2-{(2S)-2-{[methyl{2-

pyridinylmethyl)amino)carbonyl)-1-pyrrolidinyl)-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyridinylmethyllaminolcarbonyll-1-piperidinyll-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (SCI) (CA INDEX NAME)

Absolute stereochemistry.

484010-66-4 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-{(2S}-2-{{(3-pyridinylmethyl)amino}carbonyl}-1-piperidinyl}-4H-3,1-benzoxazin-6-yl}-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-67-5 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-[(25)-2-{[(4-pyridinylmethyl]amino]carbonyl]-1-piperidinyl]-4H-3,1-benzoxezin-6-yl}-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-68-6 CAPLUS
Carbamic acid. [5-methyl-4-oxo-2-[{2S}-2-[[[2-(2-pyridinyl)ethyl]amino]carbonyl]-1-piperidinyl]-4H-3,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

02/26/2007

L4 ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) Absolute stereochemistry.

484010-69-7 CAPLUS
Carbamic acid, [5-methyl-2-[(2S)-2-[[methyl](2-(2-pyridinyl)]-thyl]amino]carbonyl]-1-piperidinyl]-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-70-0 CAPLUS
Carbamic acid, [5-methyl-2-([25)-2-[[methyl]2-(3-pyridinyl]ethyl]amino]carbonyl]-1-piperidinyl]-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-71-1 CAPLUS Carbamic acid, [5-methyl-2-[(2S)-2-[[methyl[2-{4-

ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

484010-74-4 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-[(25,4R)-4-(phenylmethoxy)-2-[[(4-pyridinylmethyl)amino]carbonyl]-1-pyrrolidinyl]-4H-3,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-75-5 CAPLUS Carbamic acid, [5-methyl-4-oxo-2-[(2s,4R)-4-(phenylmethoxy)-2-[[[2-(2-pyridinyl)-thyl]amino]carbonyl]-1-pyrrolidinyl]-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-76-6 CAPLUS Carbamic acid, [5-methyl-2-[(25,4R)-2-[[methyl(2-

pyridinylmethyl)amino]carbonyl}-4-(phenylmethoxy)-1-pyrrolidinyl}-4-oxo-4H-3,1-benzoxazin-6-yl}-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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ANSMER 30 OP 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyridinyl)ethyl)aminolcarbonyl]-1-piperidinyl]-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry:

484010-72-2 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-[(25,4R)-4-[phenylmethoxy)-2-[[(2-pyridinylmethyl)amino]carbonyl]-1-pyrrolidinyl]-4H-3,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-73-3 CAPLUS
Carbamic acid, [5-methyl-4-oxo-2-[(25,4R)-4-(phenylmethoxy)-2-[{(3-pyridinylmethyl)amino]carbonyl]-1-pyrrolidinyl]-4H-3,1-benzoxazin-6-yl]-,
1,1-dimethylethyl ester (9C1) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

484010-77-7 CAPLUS Carbamic acid, [5-methyl-2-[(2S,4R)-2-[(methyl[2-(2-

pyridinyl)ethyl]amino)carbonyl]-4-(phenylmethoxy)-1-pyrrolidinyl]-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

484010-78-8 CAPLUS Carbamic acid, [5-methyl-2-[(25,4R)-2-[[methyl[2-(3-

pyridinyl)ethyl]amino|carbonyl]-4-(phenylmethoxy)-1-pyrrolidinyl)-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

484010-79-9 CAPLUS

02/26/2007

ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN Carbamic acid, [5-methyl-2-[(25,4R)-2-[[methyl {2-(4-

pyridinyl)ethyl]amino|carbonyl]-4-(phenylmethoxy)-1-pyrrolidinyl]-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 10 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

OTHER SOURCE(S):

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

US 2004110777 PRIORITY APPLN. INFO.:

11

ANSWER 31 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; B = 0, S; J = (un)substituted Ph, naphthyl, 5-6 membered heteroarom. ring, etc.; K, together with the two contiguous liking carbon atoms = a fused Ph, or fused pyridinyl, each optionally substituted with 1-4 R4; R3 = G, alkyl, cycloslkyl, etc.; G = (un)substituted Ph, 5-6 membered heteroarom. ring, etc.; R4 = H, alkyl, haloslkyl, etc.; n = 1-4), useful for controlling invertebrate pests,

prepared E.g. a multi-step synthesis of II which provided very good level

of plant protection (20% or less feeding damage) in in test on

diamondback
moth (Plutella xylostella)/radish plant, was given. This invention also
pertains to certain compds. I and compns. for controlling invertebrate
pests comprising a biol. effective amount of a compound I and at least

addnl. component selected from the group consisting of surfactants, solid diluents and liquid diluents.
438450-40-9P. 6-Chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl-4H-3,1-benzoxazin-4-one
438450-42-1P. 8-Chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-4H-3,1-benzoxazin-4-one
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT ΙT

(Reactant or reagent) (Reactant or reagent) (Reactant or reagent) (preparation of quinazolinones and pyridopyrimidinones for controlling invertebrate peats)
438450-40-9 CAPLUS

4H-3,1-Benzoxazin-4-one, 6-chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]-8-methyl- (9CI) (CA INDEX NAME)

438450-42-1 CAPLUS 4H-3, 1-Benzoxazin-4-one, B-chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

ANSWER 31 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

MARPAT 137:47212

L4 ANSWER 31 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
137:47212
ITILE:
INVENTOR(S):
Annie, Gary David; Myers, Brian James; Selby, Thomas
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
LANGUAGE:
PANILY ACC. NUM. COUNT:
1
CAPILUS COPYRIGHT 2007 ACS on STN
2003:465981 CAPLUS
17:47212
Preparation of quinazolinones and pyridopyrimidinones
for controlling invertebrate peace
Annie, Gary David; Myers, Brian James; Selby, Thomas
PATENT ASSIGNEE(S):
E. I. Du Pont de Nemoure & Co., USA .
PCT Int. Appl., 180 pp.
COEN: PIXXD2
PATENT ACC. NUM. COUNT:
1

L4 ANSWER 32 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2002:435924 CAPLUS DOCUMENT NUMBER: 137:306478

Inhibition of cathepsin G by

2-amino-3,1-benzoxazin-4

ones: kinetic investigations and docking studies Gtachow, Michael; Kuerschner, Lars; Pietsch, Markus; Ambroak, Agnieszka; Neumann, Ulf; Gnther, Robert; Hofmann, Hans-Jrg University of Bonn, Pharmaceutical Institute, Poppelsdorf, Bonn, D-53115, Germany Archives of Biochemistry and Biophysics (2002), 402(2), 180-191 CODEN: ABBIA4; ISSN: 0003-9861 Elsevier Science AUTHOR (5):

CORPORATE SOURCE: SOURCE:

PUBLISHER: Elsevier Science DOCUMENT TYPE:

LANGUAGE:

English CASREACT 137:306478

LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:306478
AB A series of benzoxazinones was used to investigate the interaction of human cathepsin G with acyl-enzyme inhibitors. With respect to the primary specificity of cathepsin G, inhibitors with hydrophobic or basic residues at position 2 were included in the study. Parameters of the enzyme acylation and deacylation were determined by slow-binding kinetics in

the presence of a chromogenic substrate. For selected inhibitors, the time course of the enzyme-catalyzed conversion of the inhibitors was followed. This approach was suitable to elucidate a rate-determining deacylation step. Docking simulations of the noncovalent me-inhibitor. enzyme-inhibitor

me-initiator complexes were performed and several clusters were analyzed for each inhibitor. The amino acids of the active site that participate in the binding of the inhibitors were determined. The arrangements in several

clusters of an inhibitor were not uniform with respect to the orientation by which the inhibitor was bound in the Sl pocket. Docking of the basic piperazino

derivs. 6 and 10 indicated an interaction with Glu 226 at the bottom of the SI specificity pocket. The (N-methyl)benzylamino derivative 1

strongest acylation rate (kon=1200 M-1 s-1), which was attributed to a high extent of pseudo-productive orientations of the noncovalent

preassoon. complex. 233684-07-6 IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (mol. modeling reveals uniform feature for participation of amino

acids of active site of cathepsin G in binding 2-amino-3,1-benzoxazin-4-one analog inhibitors) 233684-07-6 CAPLUS

4H-3,1-Benzoxazin-4-one, 6,7-dimethyl-2-(4-morpholinyl)- (9CI) (CA INDEX

ANSMER 32 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 471246-75-0 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 32 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

471246-74-9P

RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant

(mol. modeling reveals uniform feature for participation of amino acids

of active site of cathepsin G in binding 2-amino-3,1-benzoxazin-4-one analog inhibitors)
471246-74-9 CAPLUS

4H-3,1-Benzoxazin-4-one, 6-methyl-2-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

471246-73-8P 471246-75-0P RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (mol. modeling reveals uniform feature for participation of amino

of active site of cathepsin G in binding 2-amino-3,1-benzoxazin-4-one of active with the Carneywill of an axioning a manage inhibitors of the Carneywill o

INDEX NAME)

ANSWER 33 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 2001:314439 CAPLUS MENT NUMBER: 135:146775

ACCESSION NUMBER: DOCUMENT NUMBER:

Inhibition of human chymase by

2-amino-3,1-benzoxazin-

4-ones Neumann, U.; Schechter, N. M.; Gutschow, M. Novartis Pharma AG, Basel, CH-4002, Switz. Bioorganic & Medicinal Chemistry (2001), 9(4), AUTHOR (S): CORPORATE SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

CODEN: BMECEP; ISSN: 0968-0896
ISHER: Elsewier Science Ltd.
MENT TYPE: Journal
UAGE: English
A series of 2-s.amino-4H-3,1-benzoxazin-4-ones was evaluated as
acyl-enzyme inhibitors of human recombinant chymase. The compde. were
also assayed for inhibition of human cathepsin G, bovine chymotrypsin,

human leukocyte elastase. Introduction of an aromatic moiety into the 2-substituent resulted in strong inhibition of chymase, cathepsin G, and chymotrypsin. Extension of the N(Me)(R19Hs substituent by one methylene unit was unfavorable to inhibit these proteases. Towards chymase, 2-(N-beny1-N-methylamino)-4H-3,1-benzoxazin-4-one and 2-(N-beny1-N-methylamino)-6-methyl-4H-3,1-benzoxazin-4-one (I) were

d
to exhibit Ki values of 11 and 17 nM, resp., and form stable acyl-enzymes
with half-lives of 53 and 25 min, resp. Benzoxazinone I also inhibited
the human chymase-catalyzed formation of angiotensin II from angiotensin
I. A series of 2-s.amino-4M-3,1-benzoxazin-4-ones was evaluated as
acyl-enzyme inhibitors of human chymase. The inhibition of the
chymase-catalyzed formation of angiotensin II from angiotensin I by a
selected benzoxazinone was shown.
23494-28-2 133102-14-7 233684-07-6
233684-08-7

BAC (Biological activity or effector, except adverse); BSU

RI: BAC (Biological activity or effector, except suverse;; page (Biological Study) (inhibition of human chymase by 2-aminobenzoxazinones in relation to effect on other proteases and structure and angiotensin II formation)
RN 23494-28-2 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

123102-14-7 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

ANSWER 33 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

233684-07-6 CAPLUS 4H-3,1-Benzoxazin-4-one, 6,7-dimethyl-2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

233684-08-7 CAPLUS
4H-3,1-Benzoxazin-4-one, 5,8-dimethyl-2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

IT 352662-93-2F RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study, PREP (Preparation) (Inhibition of human chymase by 2-aminobenzoxazinones in relation to effect on other proteases and structure and angiotensin II formation) RN 352662-93-2 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 6-methyl-2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 34 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2001:56882 CAPLUS
DOCUMENT NUMBER: 134:96632
PVFATALLE: PVFATALLE:

INVENTOR (s):

134:96632
Pyrazolylbenzoxazines or -benzothiazines and agrochemical microbicides containing them Niki, Toshio; Matanabe, Junichi; Hayazaka, Pumio; Suzuki, Hiroyuki; Yamakishi, Kazuhiro Nissan Chemical Industries, Ltd., Japan Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JXXXAF
Patent
Japanese

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE APPLICATION NO. DATE JP 2001019691 PRIORITY APPLN. INFO.: 20010123 JP 1999-194734 JP 1999-194734

OTHER SOURCE(S): MARPAT 134:96632

AB Agrochem. microbicides, especially useful for control of Pyricularia oryxae and wheat diseases, contain title compds. I [R1 = H, C1-6 alkyl, (un) substituted Ph; R2, R3 = H, halo, C1-6 alkyl; R4 = H, halo, cyano, nitro, C1-6 alkyl(carbonyl), alkoxy(carbonyl), haloalkyl, OH, CO2H, (un) substituted phenyl (oxyl; X, Y = 0, S; n = 0.4]. 2.(3-Chlorol)-methylpyrszol-5-ylcarbonylamino) benzoic acid (1.6 g) was heated in Ac20 under reflux for 2 h to give 1.07 g I (R1 = Ms, R2 = C1, R3 = H, X = Y = 0, n = 0), which was applied to rice at 10 ppm to show 99% control of P. oryzae.

IT 319915-22-5P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological atudy); PREP (Preparation); USES (Uses) (preparation of pyrazolylbenzoxazines or -benzothiazines as agrochem. microbicides)
RN 319915-22-5 CAPLUS
(CA 4H-3,1-Benzoxazin-4-one, 2-(3-chloro-1-methyl-1H-pyrazol-5-yl)- (9CI)

INDEX NAME)

ANSWER 33 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 34 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 35 OF 79 CAPLUS COPYRIGHT 2007 ACS On STN ACCESSION NUMBER: 2001:50464 CAPLUS DOCUMENT NUMBER: 134:100878

DOCUMENT NUMBER: TITLE:

134:100878
Preparation of 2-aminobenzoxazinones for treatment of Herpes simplex virus infection.
Kawanishi, Massahi; Takahashi, Mataru
G.D. Searle and Co., USA; Asahi Chemical Industry

INVENTOR(S):

PATENT ASSIGNEE(S):

Ltd. PCT Int. Appl., 48 pp. CODEN: PIXXD2 SOURCE:

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. DATE KIND DATE APPLICATION NO. 20010118 20000711 WO 2001003697 WO 2000-US18817 A1 AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, DK, DM, EE, ES, PI, GB, GD, GE, GH, GM, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, MK, MM, MM, MX, MZ, NO, NZ, PL, PT, RO, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, AE, AL, AM, CU, CZ, DE, IL, IN, IS,

RM: GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, LT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GM, ML, MR, NR, SN, TD, TG
2378014 A1 20010118 CA 2000-2378014 20000711
2110088 A1 200101605 EP 2000-948615 20000711
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
2000012380 A 20020827 BR 2000-12380 20000711
2003504334 T 20020624 AV 2001-508977 20000711
774370 B2 20040624 AV 2000-62089 20000711
774370 B2 20040624 AV 2000-62089 20000711 CA 2378014 EP 1210088 BR 2000012380

AL BR 2000-12380 JP 2001-508977 AU 2000-62089 ZA 2002-311 US 2002-30414 JP 2003504334 AU 774370 ZA 2002000311 US 6806269 20000711 20020114 20030114 20041019 20020524 AU 2004203884 US 2005032795 AU 2004-203884 US 2004-938501 US 1999-142956P 20040909 20040813 20050210 PRIORITY APPLN. INFO.: P 19990712

> WO 2000-US18817 W 20000711 US 2002-30414 A1 20020524

OTHER SOURCE(S): MARPAT 134:100878

ANSWER 35 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

319909-70-1 CAPLUS

CATOMINE SCIO,
[2-[4-(2-furanylcarbonyl)-1-piperazinyl]-5-methyl-4-oxo-4H3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

319909-72-3 CAPLUS
Carbamic acid,
methyl-4-0x0-2-[4-(2-thienylcarbonyl)-1-piperazinyl]-4H3,1-benzoxazin-6-yl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

319909-73-4 CAPLUS Carbamic acid,

caroamic acid, methyl-4-xxx-2-(4-(phenylsulfonyl)-1-piperazinyl]-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

319909-80-3 CAPLUS Carbamic acid, methyl-2-(4-morpholinyl)-4-oxo-4H-3,1-benzoxazin-6-yl}-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

ANSWER 35 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AB Title compds. [I; RS = amino optionally substituted by 2 alkyl, aralkyl, heterocyclylalkyl, heterocyclyl, aryl; R9 = NHCOR30, R3INHCOR30, NHSOZR32;
R10 = alkyl, alkoxy, alkylamino, carboxyalkyl, alkoxyalkyl, arylamino, aryloxy, heterocycloalkoxy, etc.; R31 = alkyl; R32 = alkyl, aryl; R3 = H, halo, alkyl], were prepared Thus, trimethylsilylethyl 6-amino-3-[([1,1-dimethylethoxy)carbonyl]amino]-2-methylbenzoate was stirred 3 h with p-nitrophenyl chloroformate in CH3Cl2 followed by addition of Me (PACH3)NN and stirring for 15 h. Tetrafluorophthalic anhydride in CH3Cl2 was added followed by 3 h stirring and addition of polyamine reain to give trimethylsilylethyl 3-[([1,1-dimethylethoxy]carbonyl]amino]-2-methyl-6-[([methyl(phenylmethyl)amino]carbonyl]amino]benzoate. This was stirred with Bu4NF in THF to give 3-[([1,1-dimethylchoxy)carbonyl]amino]-2-methyl-6-[([methyl(phenylmethyl)amino]carbonyl]amino]benzoate acid. The latter was stirred 2 h with P=DC to give 6-[([1,1-dimethylchoxy)carbonyl]amino]-3-methyl-2-[methyl-2-[methyl(phenylmethyl)amino]-4H-3-benzoxazin-4-one. This showed

ed an EC50 = 1.1 µM against HSV. 319909-68-7P 319909-70-1P 319909-72-3P 319909-73-4P 319909-80-3P 319909-83-6P RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

logical study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2-aminobenzoxazinones for treatment of Herpes simplex

infection)
319909-68-7 CAPLUS
Carbamic acid, [2-(3,6-dihydro-1(2H)-pyridinyl)-5-methyl-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

ANSWER 35 OF 79 CAPILIS COPYRIGHT 2007 ACS on STN (Continued)

319909-83-6 CAPLUS

Carbamic acid, [2-(4-acetyl-1-piperazinyl)-5-methyl-4-oxo-4H-3,1-benzoxazin-6-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 36 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
134:239338
Novel bleach activators
DIXON, N. J.
CORPORATE SOURCE:
SOURCE:
Warwick International Ltd, Holywell, UK
Rivista Italiana delle Sostanze Grasse (2000), 77(3),
105-110
CODEN: RISGAD; ISSN: 0035-6808
PUBLISHER:
dei

PUBLISHER:

OCUMENT TYPE: Journal
LANGUAGE: Brigliah
B The leading bleach activator in European laundry for the last 20 yr haa
been TAED. It is coat effective, environmentally friendly and provides
effective bleaching as low as 40°C. The search for alternatives to
TAED (the leading bleach activator in European laundry for the last 20

has been going on since it was first launched on the detergents market in 1979. At Marwick International, we have tested around 1000 bleach activators and have assessed them for their wash performance, environmental effects, cost and ease of synthesis. To illustrate this work we will present the results of our investigations into the potent bleach activators 2-substituted-3,1-benzoxazinones. 23494-28-2 123102-14-7 123102-15-8
RI: TEM (Technical or engineered material use); USES (Uses) (testing of benzoxazinones as activators for laundry bleaches) 2494-28-2 CAPLUS 4H-3,1-Benzoxazino-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

123102-14-7 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

123102-15-8 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(1-piperidinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 37 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
133:317220
TITLE:
Thibitors of the tissue factor/factor VIIa-induced coagulation: synthesis and in vitro evaluation of novel specific 2-aryl substituted

4H-3,1-benzoxazin-4-

ones
Jakobsen, P.; Ritsmar Pedersen, B.; Persson, E.
Novo Nordisk Park, Medicinal Chemistry Research, Novo
Nordisk A/S, Mealoev, DK-2760, Den.
Bioorganic & Medicinal Chemistry (2000), 8(8),
2095-2103 AUTHOR (S): CORPORATE SOURCE:

SOURCE:

CODEN: BMECEP; ISSN: 0968-0896 Elsevier Science Ltd. PUBLISHER:

DOCUMENT TYPE:

LANGUAGE: English

AB The synthesis of a series of novel 2-aryl aubstituted 4H-3,1-benzoxazin-4-

,1-benzoxazin-4onea and their evaluation as specific inhibitors of the Tissue Factor
(TF)/Factor VIIa (FVIIa)-induced pathway of coagulation is reported.
Inhibitory activitiea (ICSO values) in the range 0.17 to *40 µM
on the activation of Factor X (FX) by the TF/FVIIa complex were found for
compds. having one or two electrones, aubstituents such as F, Cl and NO2
in the 2-aryl substituent. Different substitutions both
electron-attracting and donating groups were allowed in the 5, 6, 7 and 8
positions. Several of the compds. showed a selectivity ratio towards FX
and thrombin of *50, thus being the first small mole. described as
potential drugs for oral antithrombotic treatment without side effects
such as bleeding which is observed especially with thrombin inhibitors.

such as bleeding which is observed especially with thrombin inhibitors. substituent pattern being the 2-aryl group aubstituted with: 2-F; 2,6-F2; or 2-FX; 6-Cl; together with electroneg, substitution in the 5, 6, 7, or

positions. 2-Heteroaryl subatituenta like thienyl and furanyl were of low activity while some 2-(2-chloro-3-pyridyl) deriva. had inhibitory

activity

vity ... 410 µM and a good selectivity. 244205-88-7P 244205-89-8P, 4M-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-5-methyl- 244205-90-1P 244206-14-2P IT

BAC (Biological activity or effector, except adverse); BSU (Biological

logical study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and synthesis of aryl substituted benzoxazinones as anticoagulants) 244205-88-7 CAPUNS

4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-6-nitro- (9CI) (CA INDEX NAME)

ANSWER 36 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 37 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

244205-89-8 CAPLUS 4H-3, 1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-5-methyl- (9CI) (CA INDEX NAME)

244205-90-1 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-5-nitro- (9CI) (CA

244206-14-2 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-6,7-difluoro- (9CI)

INDEX NAME)

302761-09-7 302761-14-4 RL: BAC (Biological activity or effector, except adverse); BSU 02/26/20071

ANSWER 37 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(prepn. and synthesis of aryl substituted benzoxazinones as anticoagulants) 302761-09-7 CAPLUS

4H-3,1-Benzoxazin-4-one, 2-[6-chloro-4-(trifluoromethyl)-2-pyridinyl]-7-methoxy- (9CI) (CA INDEX NAME)

302761-14-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 6-bromo-2-[6-chloro-4-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

REPERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compds. [I; A3-A6, together with the two carbons to which they are attached, complete a substituted benzene in which A3 = CR3, A4 = CR4, A5 = CR5, and A6 = CR6 (wherein R3 = H, Me, MeO, etc.; one of R4 and R5 = H, alkyl, halo, etc.; the other of R4 and R5 = H; R6 = H, Me, F, etc.); Lı

CONH; Q1 = 2-pyridinyl (un)substituted at the 5-position, 3-pyridinyl (un)substituted at the 6-position, 2-pyrimidinyl (un)substituted at the 5-position, etc.; R2 = L2Q2 (L2 = NNCO, NNCH2, OCH2, etc.; Q2 = (un)substituted piperidinyl, piperazinyl, Ph, etc.)] and their pharmaceutically acceptable salts, useful as inhibitors of factor Xa (no data), were prepared and formulated. E.g., a multi-step synthesis of 1 II.HCl

II.HCl

was given. In general, compds. I are effective at 0.01-1000 mg/kg/day.

17 280772-10-3P 280772-44-3P 280772-50-1P
280772-16-67P 280772-62-5P 280772-68-1P
280772-99-4P 280772-93-1P 280772-94-1P
280772-99-4P 280773-30-7P 280773-10-6P
280773-27-5P 280773-56-6P 280773-49-1P
280773-54-8P 280773-59-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of heteroaryl-substituted aromatic amides as factor Xa
inhibitores
RN 280772-10-3 CAPLUS

CN 1-Piperazincerboxylic acid, 4-(6-chloro-4-0x0-4H-3,1-ben20xazin-2-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

280772-44-3 CAPLUS 1-Piperazinecarboxylic acid, 4-(6-methyl-4-oxo-4H-3,1-benzoxazin-2-yl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME) L4 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS On STN ACCESSION NUMBER: 2000:457059 CAPLUS COPURENT NUMBER: 133:89437

DOCUMENT NUMBER: TITLE:

133:8943/ Preparation of heteroaryl-substituted aromatic amides as factor Xa inhibitors Beight, Douglas Wade: Craft, Trelia Joyce; Denny,

INVENTOR (S) :

Penman; Franciskovich, Jeffry Bernard; Goodson,
Theodore, Jr.; Hall, Steven Edward; Herron, David
Kent; Joseph, Sajan Pariyadan; Klimkowski, Valentine
Joseph; Masters, John Joseph; Mendel, David; Milot,
Guy; Pineiro-Nunez, Marte Moria; Sawyer, Jason Scott;
Shuman, Robert Theodore; Smith, Gerald Ployd; Tebbe,
Anne Louise; Tineley, Jennifer Marie; Neir, Leonard
Crayton; Wikel, James Howard; Wiley, Michael Robert;
Yee, Ying Kwong
Eli Lilly and Co., USA; Kyle, Jeffrey, Alan; et al.
PCT Int. Appl., 403 pp.
CODEN: PIXXD2
Patent

PATENT ASSIGNEE(S):

DOCUMENT TYPE: Patent LANGUAGE: English

PAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DAŢE 20000706 WO 2000039118 WO 1999-US29946 19991215 A1 20000706 W0 1999-US29946 19991215
AT, AU, AZ, BA, BB, BB, BR, BY, CA, CH, CN, CR, CU, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, KE, KD, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MN, MM, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, TM, TR, TT, TZ, UA, UG, US, UZ, VN, VU, ZA, ZW, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, FR, GB, GR, IE, IT, LUJ, MC, NL, PT, SE, BF, BJ, CF, GA, GN, GN, ML, MR, NE, SN, TD, TG
A1 20010010 CA 1999-2161149 19991215 AE, AL, AM, CZ, DE, DK, IN, IS, JP, MD, MG, MK, SK, SL, TJ, GH, GM, KE, DK, ES, FI, CG, CI, CM, RW: CA 2361149 EP 1140903 EP 1140903 20040804 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
533454 T 20021008 JP 2000-591029 19991215
33 T 20040815 AT 1999-964279 19991215 R: JP 2002533454 272633 AT 1999-964279 ES 1999-964279 ES 2226485 20050316 19991215

US 6635657 20031021 US 2001-857751 20010608 US 2004029874 20040212 US 2003-629760 20030729 US 6759414 20040706 US 2005282862 20051222 US 2003-629817 20030729 US 7129245 20061031 PRIORITY APPLN. INFO.: US 1998-113556P P 19981223

WO 1999-US29946 W 19991215

US 2001-857751 A3 20010608

OTHER SOURCE(S): MARPAT 133:89437

ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

280772-50-1 CAPLUS
1-Piperazinecarboxylic acid, 4-(6-fluoro-4-oxo-4H-3,1-benzoxazin-2-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

280772-56-7 CAPLUS
1-Piperazinecarboxylic acid, 4-(4-oxo-4H-3,1-benzoxazin-2-yl)-,
1-dimethylethyl ester (9CI) (CA INDEX NAME)

280772-62-5 CAPLUS 1-Piperazinecarboxylic acid, 4-[4-oxo-6-(trifluoromethyl)-4H-3,1-benzoxazin-2-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME) L4 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued

F₃C C OBu-t

RN 280772-68-1 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-(4-oxo-6-(trifluoromethoxy)-4H-3,1-benzoxazin-2-yll-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

P3C-0

RN 280772-79-4 CAPLUS
CN 1-Piperidinecarboxylic acid,
4-{6-(methylaulfonyl)-4-oxo-4H-3,1-benzoxazin2-yll-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

N C OBu-t

RN 280772-84-1 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[6-[(dimethylamino)sulfonyl]-4-oxo-4H-3,1-benzoxazin-2-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Bu-t

RN 280773-10-6 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 6-chloro-2-[4-(1,1-dimethylethyl)-1-piperazinyl]-(9CI) (CA INDEX NAME)

c1 N Bu-

RN 280773-27-5 CAPLUS
CN 1-Piperidinecarboxylic scid, 4-(6-chloro-4-oxo-4H-3,1-benzoxazin-2-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 280773-36-6 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(5-chloro-4-oxo-4H-3,1-benzoxazin-2-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Me₂N-S

RN 280772-89-6 CAPLUS
CN 1-Piperazinecarboxylic acid,
4-(6-(methylsulfonyl)-4-oxo-4H-3,1-benzoxazin2-yl]-,1,1-dimethylethyl ester (9Cl) (CA INDEX NAME)

Me-S

RN 280772-94-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[6-[(dimethylamino)sulfonyl]-4-oxo-4H-3,1-benzoxazin-2-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Me₂N-S

RN 280773-03-7 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-[4-(1,1-dimethylethyl)-1-piperazinyl]- (9CI)
(CA INDEX NAME)

L4 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Contin

OBu-t

RN 280773-49-1 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(6-ethyl-4-oxo-4H-3,1-benzoxazin-2-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Ec COBU-t

RN 280773-54-8 CAPLUS
CN 1-Piperidinecarboxylic acid,
4-(6-(1-methylethyl)-4-oxo-4H-3,1-benzoxazin2-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

i-Pr COBu-t

RN 280773-69-5 CAPLUS
CN 1-Piperidinecerboxylic acid, 4-(6-acetyl-4-oxo-4H-3,1-benzoxazin-2-yl)-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REPERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 39 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2000:92318 CAPLUS DOCUMENT NUMBER: 132:279169 DOCUMENT NUMBER: TITLE: 133:27169
Synthesis and reactions of 2-[2-(2,4,6-trimethylbenzoyllvinyl]-4H-3,1-benzoxazin-4-one of expected biological activity
Abdel-Fattah, M. E.; Soliman, E. A.; Soliman, S. M. AUTHOR(S): Chemistry Department, Faculty of Science, Suez Canal University, Ismailia, Egypt Egyptian Journal of Chemistry (1999), 42(6), 499-516 CODEN: EG/CA1; ISSN: 0449-2285 National Information and Documentation Centre Lournal CORPORATE SOURCE: PUBLISHER: DOCUMENT TYPE: MENT TYPE: Journal
UAGE: English
β-(2.4,6-Trimethylbenzoyl)acryloyl chloride reacts with anthranilic
acid to give theamide which is easily cyclized by acetic anhydride to give

the title benzoxazinone (I). I was cyclized by acetic anhydride to

the title benzoxazinone (I). I was cyclized with N2H4 to give the

3-aryl-5-pyrazolylbenzoxazinone. The behavior of this compound towards

aromatic aldehydes, ketones, phthalic anhydride and phthalylamino acid

chlorides has been investigated. Reactions of I with o-phenylenedismine,

ammonia, Grignard reagents, Friedel-Crafts reagents and bromine are

described. The products showed a range of antibacterial activity.

IT 234103-62-9P

RL: BAC (Biological activity or effector, except adverse); BSU

(Biological

attidy unplacefield activity or effector) logical study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (preparation of trimethylbenzoylvinylbenzoxazinones and pyrazolylbenzoxazinones with bactericidal activity) 234103-62-9 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[4,5-dihydro-3-(2,4,6-trimethylphenyl)-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: THIS

21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 40 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN SSION NUMBER: 1999:626181 CAPLUS MENT NUMBER: 131:243274

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

Preparation of benzoxazinone derivatives as factor

inhibitors for the treatment of coagulation-related

inhibitors for the treatment of coagulation-rediseases
Persson, Egon; Jakobsen, Palle; Worsaae, Helle
Novo Nordisk A/S, Den.
PCT Int. Appl., 60 pp.
CCODEN: PIXXD2
Patent INVENTOR (S): PATENT ASSIGNEE (S) :

SOURCE:

DOCUMENT TYPE: LANGUAGE:

English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT																
	9948																
											BR,						
											GM,						
		JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG.	MK,
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG.	.12	SK,	SL,	TJ.
		TM,	TR,	TT,	UA,	UG,	UΖ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,
			TJ,														
	.RW:										ZW,						
											NL,		SĒ,	BP,	BJ,	CF,	CG,
											TD,						
AU	9928	260			A		1999	1018		AU 1	999-	2826	0		1	9990	317
US PRIORIT	6180	625			Bı		2001	0130		US 1	999-	2744	48		1	9990	322
PRIORIT	Y APP	LN.	INFO	. :			•			DK 1	998-	413			A 1	9980	324
										DK 1	998-	464		1	A 1	9980	402
									:	DK 1	998-	1559		,	A 1	9981	126
									1	US 1	998-	1116	73 P	1	P 1	9980	408
									1	US 1	998-	8106	BP	1	P 1	9980	408
									,	WO 1	999-	DK13	3	,	W 1	9990	317

OTHER SOURCE(S):

MARPAT 131:243274

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ANSWER 40 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Benzoxazinone derivs. (I) (where X and Y = 0, S, or NH; Rl and R2 = independently (unisubstituted (cyclo)alkyl, alkenyl, or alkynyl, H, halogen, alkoxy, alkylthio, carboxy, carbamoyl, sulfamoyl, (alkyl)Ph, tetrazolyl, etc.; R3 = (unisubstituted (heterolaryl, halogen, alkoxy, alkylthio, carboxy, carbamoyl, sulfamoyl, (alkyl)Ph, tetrazolyl, etc.] were prepared as inhibitors of factor VIIa-tissue factor activity. For example, 2.6-dichlorobenzoyl chloride was added to ino-5-methylbenzoic acid in toluene and TEA to yield 2-(2,6-dichlorophenyl)-6-methyl-4H-3,1-benzoxazin-4-one (II). Selected compds. of the invention were subjected to a fVIIa/TF-ctablyzed fX activity assay or fVIIa/TF-induced plasma clotting assay. Example compds. gave ICSO values ranging from 0.32 to

wM for the TP/FVII/FX assay and displayed clot ratios of 1.6 to > 30% in the clotting assay. The benzoxazinones are claimed to be useful for the treatment of coagulation-related diseases, such as deep vein thrombosis, pulmonary embolism, stroke, disseminated intravascular coagulation, vascular restenosis, platelet deposition, myocordial infarction, or atheroselerosis.
244205-88-7P, 2-(2-chloropyridin-3-yl)-6-nitro-4H-3,1-benzoxazin-4-one 244205-99-8P, 2-(2-chloropyridin-3-yl)-5-nethyl-4H-3,1-benzoxazin-4-one 244205-90-1P, 2-(2-chloropyridin-3-yl)-5-nitro-4H-3,1-benzoxazin-4-one 244206-14-2P, 2-(2-chloropyridin-3-yl)-6-nitro-4H-3,1-benzoxazin-4-one RL: BAC (Biological activity or effector, except adverse); BSU logical

ΙT

RI: BAC (Biological activity or elected, where the (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (target compound; preparation of benzoxazinone derive, as factor VII inhibitors for the treatment of coagulation-related diseases)

RN 244205-88-7 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-6-nitro- (9CI) (CA INDEX NAME)

CAPLUS

4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-5-methyl- (9CI) (CA

02/26/2007

ANSWER 40 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

244205-90-1 CAPLUS
44+3,1-Benzoxezin-4-one, 2-(2-chloro-3-pyridinyl)-5-nitro- (9CI) (CA
INDEX NAME)

244206-14-2 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)-6,7-difluoro- (9CI)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 41 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

233684-07-6 CAPLUS 4H-3, 1-Benzoxazin-4-one, 6,7-dimethyl-2-(4-morpholinyl)- (9CI) (CA INDEX

233684-08-7 CAPLUS 4H-3,1-Benzoxazin-4-one, 5,8-dimethyl-2-(4-morpholinyl)- (9CI) (CA INDEX

REFERENCE COUNT: THIS

THERE ARE 42 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 41 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1999:371533 CAPLUS DOCUMENT NUMBER: 131:129959

131:129959
One-Pot Reactions of N-(Mesyloxy)phthalimides with Secondary Amines to 2-Ureidobenzamides, 2-Ureidobenzoic Acids Ethyl 2-Ureidobenzoates, or Isatoic Anhydridea Guetechow, Michael TITLE:

AUTHOR (S): CORPORATE SOURCE: Institute of Pharmacy, University of Leipzig, Leipzig.

D-04103, Germany Journal of Organic Chemistry (1999), 64(14), SOURCE: 5109-5115

CODEN: JOCEAH: ISSN: 0022-3263 PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal English
OTHER SOURCE(S): CASREACT 131:129959
AB The reaction of N-(mesyloxy)phthelimides with secondary amines was examined

Transformations are accomplished by one-pot reactions to optionally

rd

corresponding 2-ureidobenzamides, 2-ureidobenzoic acida, Et
2-ureidobenzoates, or isatoic anhydrides, resp. The mechanism of the
acid-catalyzed hydrolysis (or alcoholysis) of intermediate
2-ureidobenzamides to 2-ureidobenzoic acids (or eaters) is discussed. A
proton trensfer mechanism involving the ureido moiety as an internal acid
catalyst is proposed. Intermediate 2-ureidobenzoic acids undergo a
further transformation to isatoic anhydrides. The utilization of the
obtained 2-ureidobenzomides, 2-ureidobenzoic acids, and Et
2-ureidobenzoates to prepare 3,1-benzoxazin-4-ones is demonstrated.
21494-20-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or resgent)

(Reactant or resgent)
(reaction of N-(mesyloxy))phthalimides with secondary amines)
23494-29-2 CAPLUS

4H-3,1-Benzoxazin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

IΤ

123102-14-7P 233684-07-6P 233684-08-7P RL: SPN (Synthetic preparation); PREP (Preparation) (reaction of N-(mesyloxy)phthalimides with secondary amines) 123102-14-7 CAPLUS

4H-3,1-Benzoxazin-4-one, 2-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 42 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:285715 CAPLUS
DOCUMENT NUMBER: 131:129961
TITLE: Synthesis and reactions of 2-[2-(2,4,6-trimethylbenzoyl]vinyl]-4H-3,1-benzoxazin-4-one and antimicrobial activity
AUTHOR(S): Abdel-Fattah, M. E.; Soliman, E. A.; Soliman, S. M.

CORPORATE SOURCE:

Chemistry Department, Faculty of Science, Suez Canal University Ismailia, Cairo, Egypt Indian Journal of Heterocyclic Chemistry (1999),

SOURCE: 8(3),

177-182 CODEN: IJCHEI; ISSN: 0971-1627 Prof. R. S. Varma Journal English CASREACT 131:129961 PUBLISHER:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

 β -(2,4,6-Trimethylbenzoyl)-acryloyl chloride reacts with anthranilic acid to give adduct I which is cyclized by the action of acetic anhydride to give the benzoxezinone II. Condensation of II with hydrazine hydrate gave pyrazole III. The behavior of III towarda aromatic aldehydea.

nes,
phthalic Anhydride, and amino acid chlorides has been investigated.
Reaction of II with o-phenylenediamine, ammonia, Grignard reagents,
Priedel-Craftes reaction and bromine has been described. Some of the
compds. were tested for antibacterial activity; some were active against
gram-neg, and gram-pos. bacterial.
234103-62-9P
RL: BAC (Biological activity or effector, except adverse); BSU

02/26/20071

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Page 37

ANSWER 42 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (prepn. and bactericidal activity of benzoxazinones and (prepn. and bactericidal activity of Denzoxazinones and quinazolinones)
RN 234103-62-9 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-[4,5-dihydro-3-(2,4,6-trimethylphenyl)-1H-pyrazol-5-yl)- (9C1) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REPERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

ANSWER 43 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Title compde. I (X = CH2, CO, bond; Y = O, S, NH; R1 = Ph; R2 = H, Ph; R3 = H, Me) and their pharmaceutically acceptable salts were prepared as tachykinin antagonists. Thus, I (X = CO, Y = O, R1 = Ph, R2 = R3 = H)

prepared by reaction of (S)-prolyl-(S)-3-(2-naphthyl)alanyl-N-benzyl-N-methylamide with 2-isocyanatobenzoyl chloride. 210775-87-4P RL: BAC (Biological activity or effector, except adverse); BSU IT

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of heterocyclyl prolyl (naphthyl) alaninamides as tachykinin

antagoniste 210775-87-4 CAPLUS L-Alaninamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl-N-methyl-3-(2-naphthalenyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSMER 43 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1998:509212 CAPLUS DOCUMENT NUMBER: 129:149249 Preparation - 4 - -

Preparation of heterocyclyl prolyl (naphthyl)alaninamides as tachykinin

antagonists INVENTOR(S):

Walpole, Christopher Simon John; Prashad, Mahavir; Har, Denis Nowartis A.-G., Switz.; Novartis Pharmaceuticals UK Ltd. PCT Int. Appl., 27 pp. CODEN: PIXXD2 Patent PATENT ASSIGNEE(S):

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PALENT .	MFOR		ON:														
PAT	TENT :	NO.			KIN	D	DATE			APP	LICA	LION	NO.			DATE	
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										WO	1997	EP73	07			19971	229
WO	9831	704			A3		1998	0911									
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		DK,	EE,	ES,	PI,	GB,	GE,	GH,	GM,	GW	, HU	ID,	IL,	IS,	JΡ	, KE,	KG,
																, MW.	
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							YU,										
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											, SE	BP,	BJ,	CF,	CG	, CI,	CM,
							SN,										
CA	2278	057			A1		1998	0723		CA	1997	- 2278	057			19971	229
CA	2278	057			С		2004	0504								19971 19971	
AU	9857	642			A		1998	0807		ΑU	1998	- 5764	2			19971	229
EP	9648	67			A2		1999	1222		EΡ	1997	9539	27			19971	229
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					DE,	DK,	Es,	FR,	GB,	GR	. IT.	LI,	LU,	NL,	SE	, MC,	PT,
		IE,	PI														
JP	2000	5162	57		T		3000	1205		J₽	1998	-5336	09			19971 19971 19971 19971	229
AT	2905	46			T		2005	0315		AΤ	1997	9539	27			19971	229
PT	9648	67			T		2005	0729		PT	1997	9539	27			19971	229
E5	2239	368			T3		2005	0916		ES	1997	9539	27			19971	229
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ZA	9800	256			A		1998	0714		ZA	1998	- 256				19980 19990 20051	113
US	6107	293			A		3000	0822		US	1999	-3416	26			19990	714
JP	2006	0894	99		A		3006	0406		JΡ	2005	-3440	56			20051	129
JP	3817	256			B2		2006	0906									
PRIORITY	APP	LN.	INFO	. :						GB	1997	-597		,	4	19970	114
•										JP	1998	5336	09	1	43	19971	229
								•		wo	1997	EP73	07	1	N	19971	229

OTHER SOURCE(S): MARPAT 129:149249

L4 ANSWER 44 OF 79
ACCESSION NUMBER: 1998:243698 CAPLUS
DOCUMENT NUMBER: 128:282812
TITLE: Combinatorial approaches to pharmacophoric heterocycles: a solid-phase synthesis of 3,1-benzOxazine-4-ones
AUTHOR(S): Gordeev, Mikhail F.
CORPORATE SOURCE: Versicor. Inc., Premont, CA, 94555, USA
SOURCE: Biotechnology and Bioengineering (1998), 61(1), 13-16
CODEN: BIBIAU; ISSN: 0006-1592
John Wiley & Sons, Inc.
Journal

Journal

DOCUMENT TYPE: LANGUAGE: English

AB An efficient solid-phase synthesis of 3,1-benzoxazine-4-ones is described.

Immobilized amino acid based functionalized urea derivs. undergo a high yielding heterocyclization under mild conditions in presence of coupling reagents (DIC, TeCl/Py, or Ac20) to afford 3,1-benzoxazine-4-ones I (R1 - CHMe2, Me. PhCH2, etc., R2 = M. Me. 6-OH, etc.). The method offers broad scope for structural and chemical diversity, and is amenable for combinatorial synthesis of 3,1-benzoxazine-4-ones libraries with potential

potential

ttial for discovery of novel serine protease inhibitors. 205655-62-8P

205656-62-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis of benzoxazinones as combinatorial approach)
205656-62-8 CAPUUS
L-Proline, 1-(5-methyl-4-oxo-4H-3,1-benzoxazin-2-yl)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THIS

THERE ARE 24 CITED REPERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

02/26/2007

L4 ANSWER 44 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) L4 ANSMER 45 07 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1997:723612 CAPLUS COPYRIGHT 2017 ACS on STN 1997:723612 CAPLUS 11TILE: Inhibition of cathepsin G by 41 AUTHOR(S): Gutschow, Michael; Neumann. Uli COP 128:58885 Inhibition of cathepsin G by 4H-3,1-benzoxezin-4-ones Gutschow, Michael; Neumann, Ulf Institute of Pharmacy, University of Leipzig, CORPORATE SOURCE: Leipzig, Leipzig,

D-04103, Germany

SOURCE: Bicorganic & Medicinal Chemistry (1997), 5(10),
1935-1942 CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: CASEACT 128:5885
AB A series of 4H-3,1-benzoxazin-4-ones is reported that inhibit the serine
proteases human cathepsin G and bovine chymotrypsin. The synthesis and
kinetic parameters of the alkaline hydrolysis is described. These compds. act
as acyl-enzyme inhibitors of both enzymes. The reaction of cathepsin G
with 2-benzylamino-4H-3,1-benzoxazin-4-one was studied in detail. A
partition in deacylation of the initially formed acyl-enzyme was partition in deacylation of the initially formed acyl-enzyme was observed,
leading to the formation of 2-(3-benzylureido)benzoic acid and
3-benzylquinazoline-2,4-(1H,3H)-dione. A 6-Me substitution strongly
increased the acylation rate of both proteases. Introduction of an aryl
moiety into the 2-substituent led to compds. with Ki values toward
cathepsin G in the nanomolar range. Their inhibitory potency is stronger
than that of other synthetic inhibitors of cathepsin G.

IT 21494-28-2P
RL: BAC (Biological activity or effector, except adverse); BPR
(Biological (Biological logical process; BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent) (preparation of and inhibition of cathepsin G and chymotrypsin by 4H-3,1-benzoxazin-4-ones) 21494-22-2 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 38 CITED REFERENCES AVAILABLE FOR 38

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 46 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:723315 CAPLUS
DOCUMENT NUMBER: 128:22874
TITLE: Efficient synthesis of biologically important chiral

Efficient synthesis of biologically important chiral 2-alkylamino benzoxazinones
Mohapatra, Debendra K.; Datta, Apurba
Organic III, Indian Institute of Chemical Technology,
Hyderabad, 500 007, India
Bioorganic & Medicinal Chemistry Letters (1997),
7(19), 2527-2530
CODEN: BMCLES; ISSN: 0960-894X

English CASREACT 128:22874

A novel general method has been developed for the synthesis of various amino acid derived chiral 2-substituted benzoxazinones, I (R1 = Q, Q1,

1-Pyrrolidinecarboxylic acid, 2-(4-oxo-4H-3,1-benzoxazin-2-yl)-,
1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

etc.), known inhibitors of standard serine protease superfamily. 199392-41-IP 199392-42-2P 199392-43-3P RL: SPN (Synthetic preparation); PRRP (Preparation) (preparation of (alkylamino)benzoxazinones) 199392-41-1 CAPLUS

etc.), known inhibitors of standard serine proteases of the chymotrypsin

(Continued)

L4 ANSMER 46 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued RN 19392-42-2 CAPLUS COPYRIGHT 2007 ACS on STN (Continued RN 2-2.5-trimethyl-4-(4-oxo-4H-3,1-benzoxazin-2-yl)-1,1-dimethylethyl ester, (45-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

199392-43-3 CAPLUS
3-Oxazolidinecarboxylic acid, 2,2-dimethyl-5-(4-oxo-4H-3,1-benzoxazin-2-yl)-4-phenyl-, 1,1-dimethylethyl ester, (4R-trans)- (9CI) (CA INDEX

Absolute stereochemistry

REFERENCE COUNT: THIS

FORMAT

THERE ARE 14 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

Absolute stereochemistry.

AUTHOR(S): CORPORATE SOURCE:

OTHER SOURCE(S):

SOURCE: PUBLISHER: DOCUMENT TYPE: LANGUAGE:

AB

Q2,

L4 ANSWER 47 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:487414 CAPLUS DOCUMENT NUMBER: 125:222232

DOCUMENT NUMBER: TITLE: 125:222222

Novel syntheses of camptothecin alkaloids. Part I. Intramolecular [4+2] cycloadditions of N-arylimidates and 4H-3,1-benzoxazin-4-ones as 2-eze-1,3-dienes Portunak, Joseph M. D.; Mastrocola, Antonietta R.; Mellinger, Mark; Sisti. Nicolas J.; Wood, Jeffery L.; Zhuang, Zhi-Ping Chem. Process Res. Dev., DuPont Merck Pharm. Co., Deepwater, NJ, 08023-0999, USA Tetrahedron Letters (1996), 37(32), 5679-5682 CODEN: TELEAY; ISSN: 0040-4039 AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

Elsevier

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

English CASREACT 125:222232 OTHER SOURCE(S):

Intramol. [4+2] cycloaddns. of both N-arylimidates and [4R]-3,1-benzoxazin-4-ones acting as 2-aza-1,3-dienes were described. Reaction with unactivated alkynes lead to pyrrolo[3,4-b]quinolines

Reaction with unactivated alkynes lead to pyrroloi3, 4-b]quinolines containing the ABC ring system of camptothecin. E.g., 10-methoxycamptothecin precursor I was prepared by intramol. (4+2) cycloaddn. of a 4:1 isomeric mixture of 0-methylimidate II (R = 4-MeOCSH4), which had been prepared by MeJOBF4 0-methylation of the corresponding N-(4-methoxyphenyl)-amide, followed by elimination of methanol.

IT 181512-67-4

IBIDIZ-67-4

RL: RCT (Reactant); RACT (Reactant or resgent)
(synthesis of camptothecin analogs via intramol. [4+2] cycloaddns. of N-arylimidates and 4H-3,1-benzoxazin-4-ones as 2-aza-1,3-dienes)
181512-67-4 CAPLUS

3-Pyridinecarbonitrile,

dihydro-6-(6-hydroxy-4-oxo-4H-3,1-benzoxazin-2-yl)-4-methyl-2-oxo-1-(2-propynyl)- (9CI) (CA INDEX NAME)

ANSWER 47 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

ANSWER 48 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

175594-81-7 CAPLUS
4-Piperidinecerboxylic acid, 1-[5-methyl-4-oxo-7-[[1-oxo-3-phenyl-2-[[[phenylmethoxylcarbonyl]amino]propyllamino]-4R-3,1-benzoxazin-2-yl]-,1,1-dimethylethyl ester, [S]- [9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:241536 CAPLUS
DOCUMENT NUMBER: 124:290265
ITITLE: Preparation of amino acid moiety-containing benzoxazines as elastse inhibitors
Oshida, Junichi, Kawabata, Hiroshi; Kato, Yoshinori; Kokubo, Masayuki; Ueshima, Yasuhide; Sato, Osami; Pujii, Kateuhiko
PATENT ASSIGNEE(S): Teijin Ltd., Japan
Jon. Kokai Tokkyo Koho, 34 pp. Division of Jpn. Kokai Tokkyo Koho Appl. No. 91 504,791.
CODEN: JXXXAP
DOCUMENT TYPE: Patent

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 07316056 PRIORITY APPLN. INFO.: 19951205 JP 1994-272320 JP 1991-504791

OTHER SOURCE(S):

MARPAT 124:290265

The title compds. I [R1 = H, alkyl; X = Y1A1, Y2(A2)mA3; when X is Y1A1: R2, R3 = H, (carboxy)alkyl, or NR2R3 = ring; when X is Y2(A2)mA3: R2 = alkyl, R3 = H; Y1 = amino-protecting group; Y2 = H, sulfonyl, A1, A2 = amino acid residue, etc.; A3 = lysine residue, etc.; m = 0 or 1} are prepared 7-(N-benzyloxycarbonyl-L-phenylalanyl)amino-5-methyl-2-(1-carboxyethyl)amino-4H-3,1-benzoxazin-4-one (preparation given) in vitro editions of the sulfate of the su

IC50 values of 5.1 \times 10-8 M and 1.5 \times 10-6 M against elastase and chymotrypsin, resp. 138006-70-9P

RL: BAC (Biological activity or effector, except adverse); BSU

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of amino acid moiety-containing benzoxazines as elastase inhibitors)

138066-70-9 CAPLUS
4-Piperidinecarboxylic acid, 1-[5-methyl-4-oxo-7-[[1-oxo-3-phenyl-2-([(phenylmethoxy)carbonyl]amino]propyl]amino]-4H-3,1-benzoxazin-2-yl]-,
(S)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

L4 ANSWER 49 OF 79

ACCESSION NUMBER: 1995.493544 CAPLUS
DOCUMENT NUMBER: 12:14277
3,1-Benicothiazin-4-ones and 3,1-benizokazin-4-ones: highly different activities in chymotrypein inactivation

AUTHOR(S): Neumann, U.; Guetachow, M.
CORPORATE SOURCE: Bioorganic Chemistry (1995), 23(1), 72-88
CODEN: BOCMEN; ISSN: 0045-2068
PUBLISHER: Academic
DOCUMENT TYPE: June 1995. 2016. PUBLISHER: DOCUMENT TYPE: PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 3.1-Benzothiazin-4-ones are sulfur analogs of the potent serine protease
inactivators of the 3.1-benzoxazin-4-one type, which acylate the serine
residue within the active site of the enzymes. A series of
2-amino-3.1-benzothiazinones was synthesized, but these compds. showed
only very little inhibitory activity toward chymotrypsin, a model serine
protease. Detailed investigations revealed that benzothiazinones and
benzoxazinones react with identical mechanisms, but benzothiazinones
acylate chymotrypsin with much lower rate contest. Investigations of
nonenzymic hydrolysis showed the benzothiazinones to be intrinsically
more stable than benzoxazinones. It was concluded from spectroscopic results, that benzoxazinones are highly activated due to the absence of ester-like resonance. 2-Benzoylemino-44-3,1-benzoxazin-4-one was a new, highly active chymotrypsin inactivator. In contrast, benzothiazinones were resonance stabilized. The contribution of a resonance structure with an exocyclic oxanion to the overall structure of the benzothiazinones and nonproductive binding to the active site explained their low reactivity toward chymotrypsin. 23494-28-2 RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent/
(3,1-benzothiszin-4-ones and 3,1-benzoxezin-4-ones have highly
different activities in chymotrypsin inactivation)
23494-28-2 CAPLUS
4H-3,1-Benzoxezin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

L4 ANSMER 50 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
120:285745
TITLE:
CORPORATE SOURCE:
CORPORATE SOURCE:
CAPLUS COPYRIGHT 2007 ACS on STN
120:285745
Crystal structure of 2-(morpholin-4-yl)-4H-3,1benzoxazin-4-one, C12H12N2O3
Pink, M.; Sieler, J.; Gutachow, M.
CORPORATE SOURCE:
Inst. Anorg. Chem., Univ. Leipzig, Leipzig, D-04103,
Germany SOURCE: Zeitschrift fuer Kristallographie (1993), 207(2), CODEN: ZEKRDZ; ISSN: 0044-2968 DOCUMENT TYPE: Journal LANGUAGE: English The title compound is monoclinic, space group P21/c, with a 9.733(2), b 10.789(2), c 11.363(2) Å, β 112.576(9)°; Z = 4, R = 0.044. Atomic coordinates are given. 23494-28-2 RL: PRP (Properties) (crystal structure of)
24494-28-2 CAPLUS
4H-3,1-Benzoxezin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 51 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1994:8535 CAPLUS DOCUMENT NUMBER: 120:8535 120:8535
N,N-Dimethylchlorosulfitemethaniminium chloride as a dehydrating agent. An efficient one-pot synthesis of 1,3,4-oxadiazoles and 4H-3,1-benzoxazin-4-ones Sain, Bir; Sandhu, Jagir S.
Div. Drugs Pharm. Chem., Reg. Res. Lab., Jorhat, 785 006, India TITLE: AUTHOR (S): CORPORATE SOURCE: 006, India
Indian Journal of Chemistry, Section B: Organic
Chemistry Including Medicinal Chemistry (1992),
J1B(11), 768-70
CODEN: IJSBDB; ISSN: 0376-4699
JOURNAL
English
CASREACT 120:8535 SOURCE: DOCUMENT TYPE: OTHER SOURCE(S):

$$\underset{R}{\overset{N-N}{\nearrow}}_{R^1 \quad II} \quad \overset{\circ}{\bigvee}_{R^1 \quad II}$$

RCONNNH2 (R = Ph, 4-ClC6H4, 4-O2NC6H4, 4-MeC6H4, 4-MeOC6H4, 2-thienyl)
cyclocondense with R1CO2H (RI = Ph, 4-ClC6H4, 4-O2NC6H4, 4-MeC6H4,
4-MeOC6H4, 3-pyridyl, 2-thienyl) in the presence of Me2N-:CHOSOCI Cl- (I)
to yield 1,3,4-oxadiazoles II. The reaction between anthranilic acid and
R1CO2H (RI = Ph, 4-ClC6H4, 4-O2NC6H4, 4-MeC6H4, 3-pyridyl, Me,
2-ClC6H4, 2-MeC6H4) in the presence of I affords benzoxazinones III.
53180-68-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
53180-68-0 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(3-pyridinyl)- (9CI) (CA INDEX NAME) IT

L4 ANSWER 52 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1992:128827 CAPLUS

DOCUMENT NUMBER: 116:128827

2-Aryl-substituted 4H-3,1-benzoxazin-4-ones as novel active substances for the cardiovascular system TITLE:

active substances for the Cardiovascular system Rose, Ulrich Inst. Pharm., Johannes Gutenberg-Univ., Mainz, D-6500/1, Germany AUTHOR(S): CORPORATE SOURCE: SOURCE:

Journal of Heterocyclic Chemistry (1991), 28(8), 2005-12 CODEN: JHTCAD: ISSN: 0022-152X

Journal

DOCUMENT TYPE: LANGUAGE:

English CASREACT 116:128827 OTHER SOURCE(S):

Cyclization of 2-H2NC6H4CO2H with aromatic carboxylic acids in the

ence
of POCl3 gave title compds. I (R = hetaryl, CH:CHC6H4F-4,
2.4-dimethoxyphenyl, etc.). The introduction of the phosphonate group,
e.g. I (R = 4-C6H4CH2F(0) (OR1)2, RI = Me, Et] was achieved by way of
Wohl-Ziegler bromination and subsequent Nichaelis-Arbuzov reaction with
trialkyl phosphite. Pharmacol. investigations on isolated left atrie,
ileum specimens, and Langendorff hearts as well as in vivo circulatory
studies on anesthetized rats revealed that the phosphonates exert calcium
antagonistic effects. Whereas 2-(arylvinyl)benzoxazinones gave
ounced pronounced

ones inotropic effects, I (R = 2,4-(Meo)2C6H3) exhibited relaxing effects on smooth musculature in particular and markedly increased the coronary flow through Langendorff hearts.
139355-74-IP

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and cardiovascular activity of) 139355-74-1 CAPLUS

4H-3,1-Benzoxazin-4-one, 2-[2-(methylthio)-3-pyridinyl]- (9CI) (CA INDEX

ANSWER 52 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

76903-55-4P 139355-81-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
76903-55-4 CAPUS
4H-3,1-Benzoxazin-4-one, 2-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

139355-81-0 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(2-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 53 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1992:21062 CAPLUS

DOCUMENT NUMBER: 116:21062

116:21062 Preparation of 7-{peptidylamino}-4H-3,1-benzoxazin-4-one compound and elastase inhibitor composition TITLE:

INVENTOR(S):

one compound and elastase inhibitor composition containing asme
Oshida, Junichi; Kawabata, Hiroshi; Kato, Yoshinori;
Kokubo, Masayuki; Uejima, Yasuhide; Sato, Osami;
Fujii, Katsuhiko
Teijii Ltd., Japan
PCT Int. Appl., 101 pp.
CODEN: PIXXD2
Parent

PATENT ASSIGNEE(S):

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE

WO 9112245	A1 19910822	WO 1991-JP183	19910215
W: AU, CA, JP,	KR, US		
RW: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, NL, SE	
CA 2051115	A1 19910816	CA 1991-2051115	19910215
AU 9173250	A 19910903	AU 1991-73250	19910215
AU 635403	B2 19930318		
EP 466944	A1 19920122	EP 1991-904621	19910215
R: AT, BE, CH,	DE, DK, ES, FR,	GB, IT, LI, NL, SE	
PRIORITY APPLN. INFO.:		JP 1990-32440 A	19900215
		WO 1991-JP183 A	19910215

OTHER SOURCE(S):

R SOURCE(S):

MARPAT 116:21062

For diagram(s), see printed CA Issue.
The title compds. [I; X - Y1A1, Y2(A2)mA3; A1 - amino acid residue,
peptide residue comprising 2 or 3 amino acid residues; A2 - Oly, Ala,

Leu, dipeptide residue containing these amino acid residues; A3 =

(side-chain e-chain
protected) Lym, Glu, Or Amp; Yl = amino-protecting group; Y2 = H, SO3H;
provided that when the mide-chain of A3 improtected , Y2 = H; m = 0, 1
when X = Y1A1, R2 = midel containing 1 or 2 CO2H, and R3 = H, midel 1
minion 1

when X = YiAl, R2 = alkyl containing 1 or 2 tour, and N3 = N, any-containing 1
or 2 alkyl or CO2H, or NR2R3 forming a 6- to 7-membered ring optionally
substituted with 1 or 2 alkyl or CO2H; when X = Y2(A2)mA3, R2 = alkyl and
R3 = H1, which show particularly a selective inhibiting effect on a human
leukocyte elastase and excellent H2O-solubility and residence in the lung
tissue, are prepared Thus, treatment of BOC-LysCOCMe3)-ON with
iso-Bud2CC1
in THF containing N-methylmorpholine at -15° followed by I (R1 = Me, R2
= Me2CH, R3 = X = H) (preparation given) gave I [R1,R2,R3 = unchanged; X

BOC-Lys(OCM33)] which was deprotected with 4N HCl in dioxane, treated

MeJSinNRNHSiMeJ in CH2Cl2, and then condensed with 4-ClC6H4SO2Cl in the presence of EtJN to give I (R1,R2,R3 - unchanged; X = p-ClC6H4SO2-Lys) (II). II in vitro inhibited human purulent sputum elastase and a-chymotrypsin with ICSO of 2.9 + 10-9 and 4.9 + 10-6 M and 1690 times selectivity for the elastase.

18006-70-9P
RL: SPN (Synthetic preparation); PREP (Preparation)

ANSWER 53 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) (prepn. of, as elastase inhibitor) 138006-70-9 CAPLUS (198006-70-9 CAPLUS 4-Piperidinecarboxylic acid, 1-[5-methyl-4-oxo-7-[[1-oxo-3-phenyl-2-([(phenylmethoxy)carbonyl]amino]propyl]amino]-4H-3,1-benzoxazin-2-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

138006-94-7 CAPLUS 138006-94-7 CAPLUS
1-Piperazinecarboxylic acid, 4-[5-methyl-4-oxo-7-[[1-oxo-3-phenyl-2[[(phenylmethoxylcarbonyl]amino]propyllamino]-4H-3,1-benzoxazin-2-yl]-,
1,1-dimethylethyl eater, (S) - (9C1) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 53 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ANSWER 54 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) factors that underlie these trends in Ki are further enalyzed in terms of equations that describe kon and koff. A conclusion that emerges is that chem. stable, potent benzoxazinone inhibitors of HL elastase with inhibition conste. in the manomolar range can be designed with (1) R1 alkyl groups to inhibit enzyme-catalyzed descylation, (2) small alkyl substituents linked via heteroatoms to C2 to enhance acylation and limit descylation rates, and (3) strongly electron-donating groups at C7 to stabilize the oxazinone ring to nucleophilic attack. Thus, 2-(isopropylamino-h-n-propyl-7-(dimethylamino)benzoxazinone I (R = NHCHMe2, R1 = Pr, R3 = NMe2, R4 = R4 = H) has kOH = 0.01 M-le-1, which extrapolates to a half-life at Ep T.4 of over 8.5 yr, and 2-ethoxy-5-ethyl-benzoxazinone I (R = OEt, R1 Et, R2 = R3 = R4 = H) has

= 42 picomolar. 23494-28-2P 100075-85-2P 100075-86-3P 100075-87-4P 100075-88-5P 100163-85-7P 123102-14-7P 123102-15-8P 123102-24-9P 123102-25-0P 123102-26-1P

: SPN (Synthetic preparation); PREP (Preparation) (preparation and human proteinase leukocyte elastase inhibiting

activity of:
RN 21494-28-2 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

100075-85-2 CAPLUS Glycinamide, 1-(4-oxo-4H-3,1-benzoxazin-2-y1)-L-proly1-L-leucy1- (9CI) (CA INDEX NAME)

Absolute stereochemistry

100075-86-3 CAPLUS 2-Pyrrolidinecarboxamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 54 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1990:55743 CAPLUS DOCUMENT NUMBER: 111:55743
TITLE: Design and Access Ac 112:55743
Design and synthesis of 4H-3,1-benzoxazin-4-ones as potent alternate substrate inhibitors of human laukocyte elastase
Krantz, Allen; Spencer, Robin W.; Tam, Tim F.; Liak, Teng Jiam; Copp, Leslie J.; Thomas, Everton M.; Rafferty, Steven P.
Syntex Res., Mississauga, ON, L5N 3X4, Can.
Journal of Medicinal Chemistry (1990), 33(2), 464-79
CODEN: JMCMAR; ISSN: 0022-2623

AUTHOR(S):

CORPORATE SOURCE:

DOCUMENT TYPE: Journal

LANGUAGE: OTHER SOURCE(S): English CASREACT 112:55743

4H-3,1-Benzoxezin-4-ones are alternate substrate inhibitors of the serine proteinase human leukocyte elastase (ML elastase), and form acyl enzyme intermediates during enzyme catalysis. A large variety of benzoxazinones have been synthesized using specific methods that have been adapted to achieve the pattern of ring substitution dictated by theor. considerations. The results of the inhibition of ML elastase by 175 benzoxaxinones are reported herein with reference to hydrophobicity

is. D, alkaline hydrolysis rates kOH-, inhibition consts. Ki, and their

acylation and deacylation rate consts., kon and koff, resp. The ranges for the compds. are considerable; alkaline hydrolysis rates and kon span

koff covers 5, and Ki spans 8 orders of magnitude. Multiple regression

this large data set has been used to isolate the contributions of electronic and steric effects, as well as other factors specific to

ound stability and elastase inhibition. Essentially, a simple electronic parameter is sufficient to account for almost all the variance in the

line hydrolysis data indicating that electronic factors are the major determinants of this type of benzoxazinone reactivity. Factors that significantly enhance the potency of benzoxazinones 1, are R1 alkyl groups, and electron withdrawal by R2. Bulk in R3 and R4 and compoun hydrophobicity are not significant, but substitution in R2 is highly unfavorable as are substituents linked via C to C2. The physicochem.

ANSWER 54 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

100075-87-4 CAPLUS L-Phenylalaninamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl- (9CI)

INDEX NAME)

Absolute stereochemistry.

100075-88-5 CAPLUS L-Leucinamide, 1-(4-oxo-4H-3,1-benzoxazin-2-y1)-L-proly1- (9CI) (CA NAME)

Absolute stereochemistry.

100163-85-7 CAPLUS 2-Pyrrolidinecarboxamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

Page 43

ANSWER 54 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

123102-14-7 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

123102-15-8 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(1-piperidinyl)- (9CI) (CA INDEX NAME)

123102-24-9 CAPLUS L-Alaninamide, 1-{4-0x0-4H-3,1-benzoxazin-2-yl}-L-prolyl- (9CI) (CA

Absolute stereochemistry.

ANSWER 54 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) L4 ANSWER 54 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

123102-25-0 CAPLUS L-Valinamide, 1-(4-0x0-4H-3,1-benzoxazin-2-y1)-L-proly1- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

123102-26-1 CAPLUS L-Leucinamide, 1-(7-amino-5-ethyl-4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl-(GCI) (CA INDEX NAME)

Absolute stereochemistry.

123102-49-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrogenation of)
123102-49-8 CAPLUS
L-Leucinamide, 1-(5-ethyl-7-nitro-4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 55 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:131443 CAPLUS
DOCUMENT NUMBER: 108:131443 Action of nitrogen nucleophiles on oxiranes of B-arcylacrylic acids
AUTHOR(S): Omran, S. A.; Salem, M. A. I.; Harb, N. S.; Marzouk,

Omran, S. A.; Salem, M. A. 1.; Marp, N. S.; Marzot M. I.
Fac. Sci., Ain Shame Univ., Cairo, Egypt
Egyptian Journal of Chemistry (1986), Volume Date
1985, 28(5), 399-410
CODEN: EGJCA3; ISSN: 0367-0422
JOURNAL
English
CASREACT 108:131443

CORPORATE SOURCE: SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S):

Epoxides I (R1 = ClMeC6H3, Me2C6H3) were treated with anilines to give R1COCH(OH)CH(NRR2)CO2H (R2 = methylchlorophenyl, tolyl). The reaction of with R3MNHN12 (R3 = H, Ph) gave pyrazoles II. I were heated with NaCH

give R1COCOMe and R1C(OH)MecO2H.

11 13362-04-2P 113362-05-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and condensation reactions of, with hydrazine and aniline)
RN 113362-04-2 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-{5-{4-chloro-3-methylphenyl}-1H-pyrazol-3-yl}(9CI) (CA INDEX NAME)

113362-05-3 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[5-(2,4-dimethylphenyl)-1H-pyrazol-3-yl]-(CA INDEX NAME)

L4 ANSWER 55 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 56 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
111LE:
108:94573
208:94573
Preparation of 4H-3,1-benzoxazin-4-ones as inhibitors of serine proteases
Krantz, Alexander; Spencer, Robin; Tam, Tim
Syntex (U.S.A.), Inc., USA
U.S., 39 pp. Cont.-in-part of U.S. Ser. No. 608,609, abandoned.
CODEN: USXXAM
DOCUMENT TYPE:
LANGUAGE:
PAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

PAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
•••••	• • • •			
US 4657893	A	19870414	US 1984-673996	19841126
DK 8406251	A	19850628	DK 1984-6251	19841221
NO 8405176	A	19850628	US 1984-673996 DK 1984-6251 NO 1984-5176	19841221
NO 163184	c	19900418		
EP 147211	A2	19850703	EP 1984-309013	19841221
EP 147211	A3	19850814		
EP 147211	B1	19900912		
R: AT, BE, CH,	DE, FR	, GB, IT,	LI, LU, NL, SE	
CA 1269800	A1	19900529	CA 1984-470962	19841221
AT 56444	T	19900915	AT 1984-309013	19841221
AU 8437169	A	19850704	AU 1984-37169	19841224
AU 586616	B2	19890720	AT 1984-309013 AU 1984-37169	
JP 60169469	λ	19850902	JP 1984-281900	19841226
ES 539038	A1	19860601	ES 1984-539038	19841226
IL 73943	A	19890131	ES 1984-539038 IL 1984-73943	19841226
FI 8405116	Α .	19850628	FI 1984-5116	19841227
FI 79842 FI 79842	В	19891130		
FI 79842	C	19900312		
HU 36808	A2	19851028	HU 1984-4839	19841227
HU 195648	В	19880628	ZA 1984-10089	
ZA 8410089	A	19860827	ZA 1984-10089	19841227
ES 550879	A1	19870301	ES 1986-550879	19860114
PRIORITY APPLN, INFO.:			US 1983-566129 A	2 19831227
			US 1984-608609 A	2 19840509
			US 1984-673996 A	19841126
			EP 1984-309013 A	19841221

OTHER SOURCE(S): CASREACT 108:94573

ANSWER 56 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

The title compde. {I; R1 = H, alkyl; R2, R3 = H, alkyl, OH, alkoxy, alkylthio, NO2, R2N, RCONR, R2NCONH, ROZCHH; X = R4NH, R5CONR, R2NZ, ROZ; R = H, alkyl, alkenyl, alkynyl; R4 = alkyl, alkenyl, alkynyl; (un)aubstituted C3-6 cycloalkyl, phenylalkyl; R5 = RNH, ROZ, R4; Z =

acid or di- or tripeptide residue] and their pharmaceutically acceptable esters or salts were prepared as inhibitors of serine proteases (no

useful in treating inflammation and diseases involving protein degradation

2-OCNC6H4CO2Me and EtCHMeNH2 were stirred at room temperature to give 2-EtCHMeNHCONHC6H4CO2Me. The latter was dissolved in concentrated H2504

atirred 2.5 h to give I (R1-R3 = H, X = EtCHMeNH).
100075-85-2P 100075-86-3P 100075-87-4P
100075-88-5P 100163-85-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antiinflammatory and antiarthritic)
100075-85-2 CAPLUS
Glycinamide, 1-(4-oxo-4H-3,1-benzoxazin-2-y1)-L-proly1-L-leucy1- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

100075-86-3 CAPLUS 2-Pyrrolidinecarboxamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 56 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

100075-87-4 CAPLUS L-Phenylalaninamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl- (9CI)

INDEX NAME)

Absolute stereochemistry.

100075-88-5 CAPLUS L-Leucinamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl- (9CI) (CA RN CN INDEX NAME)

Absolute stereochemistry.

100163-85-7 CAPLUS 2-Pyrrolidinecerboxamide, 1-(4-oxo-4H-3,1-benzoxazin-2-y1)- (9CI) (CA INDEX NAME)

L4 ANSWER 56 OP 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 57 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1988:56047 CAPLUS DOCUMENT NUMBER: 108:56047 TITLE: 5000 FOR ACCESSION NUMBER: 108:56047

108:5504/ Some reactions of N-{(3,4-dimethylbenzoyl)acryloyl}anthranilic acid and its

derivatives:
Soliman, E. A.; Hataba, A. M.; Attia, I. A.;
El-Shahed, P. A.; Mousa, H. A.
Fac. Sci., Ain Shams Univ., Cairo, Egypt
Journal of the Chemical Society of Pakistan (1987), AUTHOR (S):

CORPORATE SOURCE: SOURCE:

9(1), 19-34 CODEN: JCSPDP; ISSN: 0253-5106 Journal English CASREACT 108:56047

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S):

. STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT .

Cyclization of anthranilic acid derivative I with RNHC(:Z)NH2 (R = H, Z S; R = PhCH2, Z = S) and with Ac2O gave pyrimidines II (R = H, PhCH2; Z = O, S) and benzoxazinone III, resp. Cyclocondensation of III with N2H4 gave aminoquinazolinone IV (R1 = H). Condensation of III with N2H4 in

the

presence of R2CO2H (R2 = H, Me, Et, Pr) gave IV (R1 = COR2). Some reactions of IV (R1 = H) were also investigated.

IT 112371-53-6P 112371-70-7P 112371-71-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 112371-53-6 CAPULS
CN 4H-3,1-Benzoxazin-4-one,
2-(3-(3,4-4-dimethylphenyl)-4,5-dihydro-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

112371-70-7 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[3-(3,4-dimethylphenyl)-4,5-dihydro-5-isoxazolyl]- (9CI) (CA INDEX NAME)

ANSWER 57 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

112371-71-8 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(6-(3,4-dimethylphenyl)-2,3,4,5-tetrahydro-2-ox-4-pyrimidinyl)- (9C1) (CA INDEX NAME)

L4 ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1987:407144 CAPLUS DOCUMENT NUMBER: 107:7144

DOCUMENT NUMBER: TITLE: Synthesis of some new benzoxazinone and quinazolone derivatives

derivatives
Soliman, E. A.; Haesan, M. A.; Salem, M. A. I.;
Sherif, I. S.
Fac. Sci., Ain Shams Univ., Ceiro, Egypt
Egyptian Journal of Chemistry (1985), Volume Date
1984, 27(6), 789-802
CODEN: EGJCA3; ISSN: 0367-0422
Journal AUTHOR (S):

CORPORATE SOURCE:

DOCUMENT TYPE:

English CASREACT 107:7144 OTHER SOURCE(S):

STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT •

Aroylvinylbenzoxazinones I (R = H, U; R1 = Br, Me; X = O) were prepared

anthranilic acid and B-aroylacryloyl chlorides with following cyclization using Ac20. The reactions of I (X = 0) with amines, hydrazines, hydroxylamine, and (thiolurea yielded benzoxazinones II (X = 0, Y = e. g. NH. NPH, NAC, 0) and III (X = 0, S) and quinazolones I (X = NC6H4Me-4, NC6H4OMe-4) and II (X = NNH2; Y = NH).

97272-12-12-9 97272-13-49 97272-14-5P
97272-12-219 97272-13-69 97272-57-6P
97272-23-P 97272-55-98 97272-56-2P
97272-62-PP 107833-56-7P
RL: SPN (Synthetic preparation); PREP (Preparation)

97272-62-1P 107833-56-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
97272-12-3 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-isoxaziolyl]- (9CI) (CA INDEX NAME)

97272-13-4 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(4-bromophenyl)-4,5-dihydro-5-imoxazolyl](SCI) (CA INDEX NAME)

10/554,090

Page 46

L4 ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 97272-14-5 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 2-(6-(3-chloro-4-methylphenyl)-2,3,4,5-tetrahydro-2-oxo-4-pyrimidinyl]- (CA INDEX NAME)

RN 97272-15-6 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[6-(3-chloro-4-methylphenyl)-2,3,4,5-tetrahydro2-thioxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

97272-16-7 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[6-(4-bromophenyl)-2,3,4,5-tetrahydro-2-oxo-4-pyrimidinyl)- (SCI) (CA INDEX NAME)

ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN pyrazol-5-yl]- (9CI) (CA INDEX NAME) (Continued)

RN 97272-57-6 CAPLUS
CN 1H-Pyrazole-1-carboxaldehyde,
3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-(4oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

RN 97272-58-7 CAPLUS CN 1H-Pyrezole, 1-acetyl-3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9Cl) (CA INDEX NAME)

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L4 ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

RN 97272-17-8 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 2-[6-(4-bromophenyl)-2,3,4,5-tetrahydro-2-thioxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

97272-53-2 CAPLUS
4H-3,1-BenZOX2Zin-4-one, 2-[3-(3-chloro-4-methylphenyl)-4,5-dihydro-1-phenyl-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

97272-55-4 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(4-bromophenyl)-4,5-dihydro-1-phenyl-2H-

ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

97272-59-8 CAPLUS
1H-Pyrazole, 3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)-1-(1-oxopropyl)- (9CI) \ (CA INDEX NAME)

97272-61-2 CAPLUS : .
1H-Pyrazole, 1-acetyl-3-(4-bromophenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

. 97272-62-3 CAPLUS
1H-Pyrezole, 3-(4-bromophenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2yl)-1-(1-oxopropyl)- (9Cl) (CA INDEX NAME)

ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

- Et

107833-56-7 CAPLUS
1H-Pyrazole-1-carboxaldehyde, 3-(4-bromophenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

97272-52-1P 97272-54-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, acetylation and hydrazinolysis of)
97272-53-1 CAPUS
4H-3,1-Benzoxazin-4-one, 2-[3-(3-chloro-4-methylphenyl)-4,5-dihydro-1Hpyrazol-5-yl]- (9CI) (CA INDEX NAME)

L4 ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 97272-54-3 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 2-[3-(4-bromophenyl)-4,5-dihydro-1H-pyrazol-5-yl]-(9C1) (CA INDEX NAME)

L4 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1987:119830 CAPLUS DOCUMENT NUMBER: 106:119830 Some valid

AUTHOR (S):

106:119830
Some reactions of pyrazolinylbenzoxazones and -quinazolones
Soliman, E. A.; Hassan, M. A.; Salem, M. A. I.;
Sherif, I. S.
Fac. Sci., Ain Shams Univ., Cairo, Egypt
Journal of the Chemical Society of Pakistan (1986), CORPORATE SOURCE: SOURCE:

8(2), 97-106 CODEN: JCSPDF; ISSN: 0253-5106

Journal English CASREACT 106:119830

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Arylpyrazolinylbenzoxazinones I (X = 0; R = H; R1 = H, C1; R2 = Me, Br) react easily with amines R3NH2(R3 = e.g. Me, Bu, 4-MeOC6H4, PhCH2) in ELOH

react easily with amines R3NM2(R3 = e.g. Me, Bu, 4-MeOCSHA, PhCH2) in

Or AcOH to furnish the corresponding anilides II or quinazolones I (R =
Ac; X = NR3). Acetylation, benzoylation and nitrosation of I led to the
formation of I (R = Ac, Bz, NO; X = O). Other transformations of I were
also investigated.

IT 107263-61-69 107263-63-7P 107263-63-8P
107263-64-9P 107263-66-1P 107263-66-1P
107263-67-2P 107263-68-3P 107263-69-4P
107263-13-1P 107268-14-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 107263-61-6 CAPUS
CN 1H-Pyrazole.
1-acctyl-3-(4-chloro-3-methylphenyl)-4,5-dihydro-5-(4-oxo-4H3,1-benzoxazin-2-yl)- (SCI) (CA INDEX NAME)

L4 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

107263-62-7 CAPLUS
1H-Pyrazole, 1-acety1-3-(3-bromopheny1)-4,5-dihydro-5-(4-oxo-4H-3,1-berzoxazin-2-y1)- (9CI) (CA INDEX NAME)

RN 107263-63-8 CAPLUS
CN 1H-Pyrazole,
1-benzoyl-3-(4-chloro-2-methylphenyl)-4,5-dihydro-5-(4-oxo-4H3,1-benzoxazin-2-yl)- (9Cl) (CA INDEX NAME)

107263-64-9 CAPLUS 1H-Pyrazole, 1-benzoyl-3-(3-bromophenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-

02/26/2007

ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN benzoxazin-2-yl)- (9CI) (CA INDEX NAME) (Continued)

107263-65-0 CAPLUS 4H-3,1-Benzoxzin-4-one, 2-[3-(4-chloro-3-methylphenyl)-4,5-dihydro-1-nitroso-1H-pyrazol-5-yl)- (9CI) (CA INDEX NAME)

107263-66-1 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(3-bromophenyl)-4,5-dihydro-1-nitroso-1H-pyrazol-5-yll- (9C1) (CA INDEX NAME)

L4 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

107288-13-1 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(4-chloro-3-methylphenyl)-4,5-dihydro-1-(4-morpholinylmethyl)-1H-pyrazol-5-yl]- (9Cl) (CA INDEX NAME)

107288-14-2 CAPLUS
4H-3.1-Benzoxazin-4-one, 2-[3-(3-bromophenyl)-4,5-dihydro-1-(4-morpholinylmethyl)-1H-pyrazol-5-yl)- (9Cl) (CA INDEX NAME)

L4 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

107263-67-2 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(4-chloro-3-methylphenyl)-4,5-dihydro-1-(1-piperidinylmethyl)-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

107263-68-3 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(4-bromo-3-(4-chloro-3-methylphenyl)-4,5-dihydro-1H-pyrazol-5-yl]- (9C1) (CA INDEX NAME)

107263-69-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(4-bromo-3-(3-bromophenyl)-4,5-dihydro-1H-pyrazol-5-yl)- (9CI) (CA INDEX NAME)

L4 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

107263-38-7 107263-39-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of)
107263-38-7 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-{3-(4-chloro-3-methylphenyl)-4,5-dihydro-1Hpyrazol-5-yl]- (9C1) (CA INDEX NAME)

RN 107263-39-8 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 2-[3-(-3-bromophenyl)-4,5-dihydro-1H-pyrazol-5-yl]-(9CI) (CA INDEX NAME)

Habte

L4 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ACCESSION NUMBER:

DOCUMENT NUMBER:

1987:46298 CAPLUS

106:46298

TITLE:

Inhibition of serine proteases by benzoxazinones:
effects of electron withdrawal and 5-substitution
spencer, Robin W.; Copp, Lealie J.; Bonaventura,
Bonnie; Tam, Tim F.; Lisk, T. J.; Billedeau, Roland
J.; Krantz, Allen

Syntex Res., Mississauga, ON, LSN JX4, Can.

Biochemical and Biophysical Research Communications
(1986), 140(3), 928-33

CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE:

LANGUAGE:

AB A series of substituted 4H-3,1-benzoxazin-4-ones were assayed as
inhibitors of human leukocyte elastese (HLE) and other serine proteases.
The benzoxaziones were kinetically competitive, alternate substrate
inhibitors that inhibited by acylation and slow deacylation. Two
structure-activity relations were found which were consistent with this
mechanism. First, electron withdrawal at position 2 gave better
inhibition (lower Ki values) because acylation rates were increased while
deacylation was relatively unaffected. Second, benzoxazionenes with Me or
Et substitution at position 5 were better inhibitors of HLE because the
acyl-enzymes formed from these compds. were 2,6-disubstituted benzoic
acid
esters and their deacylation was sterically hindered.

esters and their deacylation was sterically hindered.

106324-50-9
RL: BIOL (Biological study)
(elastase of human leukocytes and other serine proteinases inhibition by, kinetics of, structure in relation to)
106324-50-9
CAPLUS
1-Pyrrolidinecarboxylic acid, 2-(4-oxo-4H-3,1-benzoxazin-2-yl)-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 61 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:626465 CAPLUS

DOCUMENT NUMBER: 105:226465
Synthesis and some reactions of new

3.1-benzoxazin-4-one derivatives
Soliman, E. A.; Attia, I. A.; Guber, A. M.

CORPORATE SOURCE: 50IRCE; Attia, I. A.; Guber, A. M.

EGYPTION TYPE: 20DEN: EGJCA3; ISSN: 0367-0422

DOCUMENT TYPE: Journal

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): QI English CASREACT 105:226465

AB Benzoxazinone I was prepared by treating 2-HO2CC6H4NH2 with 2,5-Me2C6H3COCH:CHCOCCI and cyclization of 2-HO2CC6H4NHCOCH:CHCOCGI and cyclization of 2-HO2CC6H4NHCOCH:CHCOCGH3Me2-2,5 with Ac2O. I reacted with amines, hydrazines, NH2OH, ureas, and thiouress to form various heterocyclic derivs.

IT 105491-13-8P 105491-14-9P 105493-15-0P 105493-13-19 105493-13-8P 105493-19-4P 105493-12-3P 105493-19-4P 105493-23-0P 105507-04-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and acylation of)
RN 105493-13-8 CAPLUS CN 4H-31-Benzoxazin-4-one, 2-[3-(2,5-dimethylphenyl)-4,5-dihydro-1H-pyrazol-5-yl]- (QCI) (CA INDEX NAME)

105493-14-9 CAPLUS 4H-3,1-Benzoxazin-4-one, Habte

ANSWER 61 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN pyrazol-5-yl]- (9CI) (CA INDEX NAME) (Continued)

RN 105493-15-0 CAPLUS CN 1H-Pyrazole-1-carboxaldehyde, 3-(2,5-dimethylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

105493-16-1 CAPLUS
1H-Pyrazole, 1-acety1-3-(2,5-dimethylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

RN 105493-17-2 CAPLUS CN 1H-Pyrazole, 3-(2,5-dimethylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-

02/26/2007

ANSWER 61 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN 2-yl)-1-(1-oxopropyl)- (9CI) (CA INDEX NAME) (Continued)

RN 105493-18-3 CAPLUS CN 1H-Pyrazole, 1-benzoyl-3-(2,5-dimethylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

105493-19-4 CAPLUS 4H-3,1-BenZoxazin-4-one, 2-(3-(2.5-dimethylphenyl)-4,5-dihydro-1-nitroso-1H-pyrazol-5-yll- (9CI) (CA INDEX NAME)

L4 ANSWER 61 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

105493-23-0 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3-(2,5-dimethylphenyl)-4,5-dihydro-5-iaoxazolyl]- (9CI) (CA INDEX NAME)

105507-04-8 CAPLUS 4H-3, I-Benzoxazin-4-one, 2-[6-(2,5-dimethylphenyl)-2,3,4,5-tetrahydro-3-[phenylmethyl)-2-thioxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

ANSWER 61 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 105493-20-7 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 2-[4-bromo-3-(2,5-dimethylphenyl)-4,5-dihydro-1H-pyrazo1-5-yl]- (9CI) (CA INDEX NAME)

105493-21-8 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-[6-(2,5-dimethylphenyl)-2,3,4,5-tetrahydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

105493-22-9 CAPLUS 4M-3,1-Benzoxazin-4-one, 2-[6-(2,5-dimethylphenyl)-2,3,4,5-tetrahydro-2-thioxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 62 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
104:88568
4H-3,1-Benzowazin-4-ones and related compounds and pharmaceutical compositions containing them krantz, Alexander, Tam, Tim F.; Spencer, Robin W. Syntex (U.S.A.), Inc., USA
BOURCE:
DOCUMENT TYPE:
DO

English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIN	D DATE	APPLICATION NO.		DATE
EP 147211	A2	19850703	EP 1984-309013		19841221
EP 147211	A3	19850814			
EP 147211	B1	19900912			
R: AT,	, BE, CH, DE,	FR, GB, IT,	LI, LU, NL, SE		
US 4657893	A	19870414	US 1984-673996		19841126
AT 56444	T	19900915	AT 1984-309013		19841221
ZA 8410089	A	19860827	ZA 1984-10089		19841227
PRIORITY APPLN.	INFO.:		US 1983-566129	A	19831227
			US 1984-608609	A	19840509
			US 1984-673996	A	19841126
			EP 1984-309013	A	19841221

GI

The title compds. [I: R1 = H, C1-8 alkyl; R2, R3 = H, halo, C1-8 alkyl, alkoxy; thioalkyl, NO2, N(R5)2, NR5COR5, NNCON(R5)2, NNCO2R5; R4 = NRR6, NR5COR7, XN(R5)2, XOR5; R5 = H, C1-8 alkyl, alkenyl, alkynyl; R6 = C1-8 alkyl, alkenyl, alkynyl, (un)substituted cycloalkyl or Ph; R7 = as [or

alkoxy, NNRS, XORS; X = amino acid, di- or tripeptide] are useful as serine protease inhibitors. I were prepared by several methods, e.g., by cyclization of II (R1 - R4 as above; R8 = CO2H, CO2He, CO2He, tcc.), or

substitutions of I (R4 = 1-benzotriazoly1). Thus, a solution of Me2CRN2 was added to 2-(1-benzotriazoly1)-5-ethy1-4H-3,1-benzoxazin-4-one in dry CH2Cl2 and the mixture stirred for 20 min. TLC showed that the reaction

completed, after which the CH2C12 was evaporated, the residue $02/26/2007^{\text{aphed}}$

ANSMER 62 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) over silics gel, the fractions combined and evapd., and the resulting solid recrystd. from pentane to give 40 g 5-ethyl-2-(isopropylamino)-4H-3,1-benzoxazin-4-one (I; Rl = Et, R2 = R3 = H, R4 = NHCHMe2). Inhibition kinetics of l in human leukocyte elastase and bovine trypsin assays are given. Pharmaceutical compns. contg. I are also presented. 100075-88-3P 100075-86-3P 100075-87-9 PRP (Preparation) (PREP (Preparation) (preparation of, as serine protease inhibitor) 100075-85-2 CAPLUS (I) (A-OXO-4H-3,1-benzoxazin-2-yl)-L-prolyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

100075-86-3 CAPLUS 2-Pyrrolidinecarboxamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-, (S)- (9CI) (CX INDEX NAME)

100075-87-4 CAPLUS L-Phenylalaninamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl- (9CI)

Absolute stereochemistry.

L4 ANSMER 63 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
1985:454014 CAPLUS
103:54014
Synthesis of some new benzoxazones and quinazolones derivatives
Soliman, E. A.; Hassan, M. A.; Salem, M. A. I.;
Sherif, I. S.
Fac. Sci., Ain Shams Univ., Cairo, Egypt
Journal of the Chemical Society of Pakistan (1984), 6(3), 183-90
CODEN: JCSPDF; ISSN: 0253-5106

DOCUMENT TYPE: LANGUAGE: GI

RCH:CHCOR1 (I, X = 0, R2 = H, C1, R1 = Br, Me) were prepared by treating 2-H2NC6M4CO2H with RICOCH:CHCOC1, followed by cyclization using Ac20. I reacted with hydrazines to give pyrazoles II (X1 = NH, NPh) and with urea or thiourea to give pyrimidines III (2 = 0, S). Aminolysis of 1 with R4NH2 (R4 = Me, EE, Bu, CH2Ph, 4-MeC6H4, 4-MeC6H4) yielded 2-R4NHCOC6H4NHCOCH:CHCOR1. When the aminolysis was carried out in the presence of ZnCl2 I (X = NC6H4MH=-4, NC6H4OMe-4) were formed. 97272-13-19 97272-13-4P 97272-11-5P 97272-13-8P 97272-13-8P 97272-57-6P 97272-59-8P 97272-55-4P 97272-59-8P 97272-57-60-1P 97272-61-2P 97272-62-3P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) 97272-13 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-{3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-isoxazolyl}- (9CI) (CA INDEX NAME)

RN 97272-13-4 CAPLUS

Habte

L4 ANSWER 62 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

$$\bigcap_{0}^{N}\bigcap_{M}^{N}\bigcap_{S}^{Ph}$$

100075-88-5 CAPLUS L-Leucinamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)-L-prolyl- (9CI) (CA

Absolute stereochemistry.

100163-85-7 CAPLUS
2-Pyrrolidinecarboxamide, 1-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

ANSWER 63 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 4H-3,1-BenZOXAZIn-4-one, 2-[3-(4-bromophenyl)-4,5-dihydro-5-imoxazolyl)-(9CI) (CA INDEX NAME)

RN 97272-14-5 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[6-(3-chloro-4-methylphenyl)-2,3,4,5-tetrahydro2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

RN 97272-15-6 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[6-(3-chloro-4-methylphenyl)-2,3,4,5-tetrahydro2-thioxo-4-pyrimidinyl)- (9CI) (CA INDEX NAME)

97272-16-7 CAPLUS
4H-3,1-Benzoxesin-4-one, 2-[6-(4-bromophenyl)-2,3,4,5-tetrshydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 63 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) .

RN 97272-17-8 CAPLUS CN 4H-3,1-Benzoxazin-4-one, 2-(6-(4-bromophenyl)-2,3,4,5-tetrahydro-2-thioxo-4-pyrimidinyl)- (9C1) (CA INDEX NAME)

97272-53-2 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-{3-(3-chloro-4-methylphenyl)-4,5-dihydro-1-phenyl-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

97272-55-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3-(4-bromophenyl)-4,5-dihydro-1-phenyl-1H-

ANSWER 63 OF 79 CAPLUS COPYRIGHT 2007 ACS On STN (Continued)

97272-59-8 CAPLUS
1H-Pyrazole, 3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-berzoxazin-2-yl)-1-(1-oxopropyl)- (9CI) (CA INDEX NAME)

97272-60-1 CAPLUS
1H-Pyrazole-1-carboxaldehyde, 4.5-dihydro-3-(4-methylphenyl)-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

RN 97272-61-2 CAPLUS

Habte

L4 ANSMER 63 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) pyrazol-5-yl]- (9CI) (CA INDEX NAME)

4

RN 97272-57-6 CAPLUS
CN 1H-Pyrazole-1-carboxaldehyde,
3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-(4oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

RN 97272-58-7 CAPLUS CN 1H-Pyrazole, 1-acetyl-3-(3-chloro-4-methylphenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9C1) (CA INDEX NAME)

ANSWER 63 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 1H-Pyrazole, 1-acetyl-3-(4-bromophenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9C1) (CA INDEX NAME)

97272-62-3 CAPLUS
1H-Pyrazole, 3-(4-bromophenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2yl)-1-(1-oxopropyl)- (9CI) (CA INDEX NAME)

97272-52-1P 97272-54-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, eminolysis, or acetylation of)
97272-53-1 CAPUS
4H-3,1-Benzoxazin-4-one, 2-[3-(3-chloro-4-methylphenyl)-4,5-dihydro-1Hpyrazol-5-yl]- (9CI) (CA INDEX NAME)

10/554,090

Page 53

ANSWER 63 OP 79 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)

RN 97272-54-3 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[3-(4-bromophenyl)-4,5-dihydro-1H-pyrazol-5-yl](9C1) (CA INDEX NAME)

L4 ANSWER 65 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1982:616690 CAPLUS DOCUMENT NUMBER: 97:216690

DOCUMENT NUMBER: TITLE:

AUTHOR (S) : CORPORATE SOURCE:

97:216690
Peptide derivatives of anthranilic acid. II.
Intramolecular rearrangement products of
dipeptidylanthranil
Liberek, Bogdan: Zarebski, Jan
Inst. Chem., Univ. Gdansk, Gdansk, PL-80-952, Pol.
Pept., Proc. Eur. Pept. Symp., 16th (1981), Meeting
Date 1980, 216-41. Editor(s): Brunfeldt, K.
Scriptor: Copenhagen, Den.
CODEN: 48NNA3
Conference
English SOURCE:

DOCUMENT TYPE:

LANGUAGE

Anthranilic acid peptide I (Z = PhCH2O2C, X = MeGly, R = H) (II) was cyclized by DCC to give benzoxazinone III (R1 = Me, R2 = H), which was deblocked by hydrogenolysis and then cyclized to give azadehydrocyclol IV (R1 = Me, R2 = H), Z-Gly-MeGly-OH was coupled with anthranilic acid Me ester by DCC to give I (X = MeGly, R = Me), which was aspond to give II, IV (R1RR = (CH2)); R1 = H, R2 = CH2Ph) were prepared similarly from I (X

IT

Pro, Phe; R • H) via the resp. III.
83597-60-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and hydrogenolysis-cyclization of)
83597-60-8 CAPUMS
Carbamic acid, [2-oxo-2-[2-(4-oxo-4H-3,1-benzoxazin-2-yl)-1pyrrolidinyl]ethyl]-, phenylmethyl ester, (5)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSMER 64 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 1984:174580 CAPLUS
DOCUMENT NUMBER: 100:174580
Synthesia of discounting the state of discounting the 100:174580
Synthesis of derivatives of pyrrole using methyl
2-isothiocyanatobenzoate
Looney-Dean, V.; Lindamood, B. S.; Papadopoulos, E.

AUTHOR (S):

Dep. Chem., Univ. New Mexico, Albuquerque, NM, 87131, USA CORPORATE SOURCE:

Synthesis (1984), (1), 68-71 CODEN: SYNTBF; ISSN: 0039-7881 SOURCE:

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI Journal English CASREACT 100:174580

Pyrrolecarbanilides I (Z = S, O; R = OMe, OH, NH2, NHCH2Ph) were prepared Pyrrole was heated with 2-SCNC6H4CO2Me to yield I (Z = S, R = OMe), which was converted to I (Z = O, R = OMe) and I (Z = S, R = OH) (II). II was cyclized to a benzoxaxinone, and cleavage of the product with NH3 and PhOH2MH2 gave I (Z = O, R = NH2, NHCH2Ph).

9812-78-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ring cleavage of, by ammonia and benzylamine)

9812-78-2 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(1H-pyrrol-2-yl)- (9CI) (CA INDEX NAME)

ANSWER 65 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L4 ANSWER 66 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
1982:6663 CAPLUS
96:6663
HEterocyclization with iminium chlorides. II.
Synthesis of 4H-[3,1]-benzoxazine-4-ones and quinazolinones
Bitter. Istvan; Szocs, Laszlo; Toke, Laszlo
Dep. Org. Chem. Technol., Tech. Univ., Budapest, AUTHOR(S): CORPORATE SOURCE: Hung.. SOURCE:

Acta Chimica Academiae Scientiarum Hungaricae (1981), 107(1), 57-66 CODEN: ACASA2; ISSN: 0001-5407 Journal Engliah CASREACT 96:6663

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

o-H2NC6H4CO2Me was treated with R1R2N+:CC12.Cl- (R1 = Me, R2 = Ph; R1 =

= Me, R1R2N = morpholino) to give the benzoxazoles I. I were cleaved

R3NH2 (R3 = H, Bu, Ph, o-HO2CC6H4, 4-ClC6H4, etc.) to give o-(R1NHCO)C6H4NHCONRIR2, which were cyclized in boiling Ac2O or DMF to give the quinazolinones II.
79860-06-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ring cleavage of)
79860-06-3 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(4-morpholinyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● H¢1

DOCUMENT TYPE:

Journal

English CASREACT 95:115462

LANGUAGE: OTHER SOURCE(S): GI

/
Treating the title compound (I, X = O, R = H) (II) with AcCl, BzCl, piperidine, and morpholine gave I (X = O; R = Ac. Bz, piperidino, morpholino; resp., whereas treating II with RiNH2 (R1 = Me, Bu, PhCH2, 4-MeOCSH4) gave I (X = NR1, R = H).
70012:29-2
RE: RCT (Reactant); RACT (Reactant or reagent)
(acylation and aminolysis of)
70012:29-2 CAPLUS
4H-J.1-Benzoxasin-4-one,
-(3,4-dichlorophenyl)-4,5-dihydro-1H-pyraxol-5-yl)- (9CI) (CA INDEX NAME)

78958-68-6P 78958-69-7P 78958-70-0P 78958-71-1P 78958-76-6P 78958-77-7P 78958-78-8P 78958-79-9P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) 78958-68-6 CAPLUS 1H-Pyrazole, 1-acetyl-3-(3,4-dichlorophenyl)-4,5-dihydro-5-{4-oxo-4H-3,1-

ANSMER 66 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 23494-28-29
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of) 21494-28-2 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

ANSWER 67 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN benzoxazin-2-yl)- (9CI) (CA INDEX NAME) (Continued)

78958-69-7 CAPLUS 1H-Pyrazole, nzoyl-3-(3,4-dichlorophenyl)-4,5-dihydro-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9Cl) (CA INDEX NAME)

78958-70-0 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(3,4-dichlorophenyl)-4,5-dihydro-1-(4-morpholinyl)-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

L4 ANSWER 67 OF 79 CAPLUS: COPYRIGHT 2007 ACS on STN

78958-71-1 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-[3-(3,4-dichlorophenyl)-4,5-dihydro-1-(1-piperidinyl)-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

78958-76-6 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-{3-(3,4-dichlorophenyl)-4,5-dihydro-1-nitroso-1H-pyrazol-5-yl}- (9CI) (CA INDEX NAME)

ANSWER 67 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

78958-79-9 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-{3-(3,4-dichlorophenyl)-4,5-dihydro-5-isoxazolyl]- (9CI) (CA INDEX NAME)

ANSWER 67 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

RN 78958-77-7 CAPLUS CN 4H-3.1-Benzoxazin-4-one, 2-[4-bromo-3-[3,4-dichlorophenyl]-4,5-dihydro-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

RN 78958-78-8 CAPLUS
CN 4H-3,1-Benzoxazin-4-one,
2-[3-(3,4-dichlorophenyl)-4,5-dihydro-1-phenyl-1H-pyrazol-5-yl]- (9Cl) (CA INDEX NAME)

L4 ANSWER 68 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 1981:121596 CAPLUS
DOCUMENT NUMBER: 2,3-Dipyridylquinezolines
Hisamiteu Pharmaceutical Co., Inc., Japan
SOURCE: JDN. Kokai Tokkyo Koho, 3 pp.
CODEN: JXXXAF
DOCUMENT TYPE: Patent

Japanese

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE 19801117 APPLICATION NO. DATE

JP 55147279 PRIORITY APPLN. INFO.: JP 1980-44865 JP 1980-44865

19800404 A 19800404 GI

Quinazolines I (R, R1 = pyridyl), useful as antidepressants (no data) and inflammation inhibitors, were prepared. Thus, treating 0.35 g II with

G
3 -aminopyridine at 200° gave 0.3 g [(R = R1 = 3-pyridyl)]. The
latter compound showed antiinflammatory activity approx. equal to that of
phenylbutazone.
53180-68-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminolysis of)
53180-68-0 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(3-pyridinyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 69 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:121561 CAPLUS
TITLE: 1981:121561 CAPLUS
1941:121561 DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2914915	A1	19801030	DE 1979-2914915	19790412
1L 59/75	A	19840330	IL 1980-59775	19800404
BR 8002142	A	19801125	BR 1980-2142	19800408
US 4315766	Α.	19820216	US 1980-138414	19800408
CA 1145748	A1	19830503	CA 1980-349377	19800408
DD 149995	A5	19810812	DE 1979-2914915 IL 1980-59775 BR 1980-2142 US 1980-138414 CA 1980-349377 DD 1980-220307 SU 1980-2903456 CS 1980-2490	19800409
50 980601	A3	19821207	50 1980-2903456	19800409
CS 212229	82	19820326	CS 1980-2490	19800410
HU 26093	A2	19830928	HU 1980-872	19800410
HU 185882	8	19850428	PL 1980-223370	
PL 126871	82	19830930	PL 1980-223370	19800410
AU 8057375	Α.	19801016	AU 1980-57375	19800411
AU 535463	82	19840322	AU 1980-57375 EP 1980-101957	
EP 17931 EP 17931	A2	19801029	EP 1980-10195/	19800411
		19810121		
R: AT, BE, CH,	DE, PR	, GB, 1T,	LU, NL, SE	
JP 55141476	2	19801105	JP 1980-47006 ZA 1980-2173 ES 1980-490486 RO 1980-100802	19800411
JP 02024025		19900530	#1 1440 0170	
ZA 8002173	Ŷ.	19810624	ZA 1980-21/3	19800411
25 490486	AI	19811101	ES 1980-490486	19800411
RO 81076	V.7	19030201	EP 1983-100793	19000411
EP 84893				19800411
EP 84893		19870114		
R: AT, BE, CH,				
AT 4500	DE, FR	10040216	NT 1000-101057	10000411
AT 34001	- T	10070115	AT 1000-101937	10000411
110 22002	r.	198/0115	NE 1003-100793	19800411
TODITY ADDIA TARA	-	19860225	AT 1980-101957 AT 1983-100793 US 1983-506316 DE 1979-2914915	19030021
CIORTII APPLA. INFO.:			DE 1979-2914915 /	19/90412
			US 1980-138414 A	5 19800408
			EP 1980-101957	19800411

MARPAT 94:121561 OTHER SOURCE(S):

ANSWER 69 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

76903-56-5 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-pyrazinyl- (9CI) (CA INDEX NAME)

76903-58-7 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(3-methyl-5-ieoxazolyl)- (9CI) (CA INDEX

76903-60-1 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(2-methyl-4-morpholinyl)- (9CI) (CA INDEX

76903-62-3 CAPLUS 4H-3,1-Benzoxezin-4-one, 2-(2,6-dimethyl-4-morpholinyl)- (9CI) (CA INDEX NAME)

ANSWER 69 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Benzoxazines I [R1 = H. halo, NO2, (halo)alkyl, haloalkoxy, -alkylthio, cyano, thiocyano, CO2R3 (R3 = alkyl, alkenyl), CONR4R5 (R4 = alkyl, R5 = H, alkyl), ZIR4 (Z, Z1 = O. S), SOR4, SOZR4, SOZR4, SOZR4R4R5, COR4; R2 = Me-substituted cyclo- or bicycloaliph., heterocyclyl optionally Me- or halo-substituted; R6-substituted aryl [R6 = R7Z2 (R7 = aliphatic; Z2 =

, So. SO2, O2C, SCO, ONHCO, SNHCO, SNHCS, NHSO2, NR7SO2, NHCONH), halo-substituted C1-4 R722, N(CF3)SCF3, NHCONHMe, NHCONMe2, NHCONMeOMe, HCONH, H, halo, cyano, thiocyano, NO2, haloalkyl, scyl, F, Cl, haloalkyl or haloalkoy-substituted aralkyl), useful as selective herbicides (extensive data tabulated), were prepared Thus, acylation by NHCOMMONAGEMENT.

(extensive data tabulated), were prepared and selected an

logical study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and herbicidal activity of) 76903-57-6 CAPLUS (AH-3,1-Benzoxazin-4-one, 2-(4-methyl-5-oxazolyl)- (9CI) (CA INDEX NAME)

76903-55-4P 76903-56-5P 76903-58-7P 76903-60-1P 76903-62-3P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) 76903-55-4 CAPLUS IT

4H-3,1-Benzoxazin-4-one, 2-(6-chloro-3-pyridinyl)- (9CI) (CA INDEX NAME)

ANSWER 69 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

L4 ANSMER 70 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1980:198066 CAPLUS 21:198066 CAPLUS Some reactions with β -(3,4-dichlorobenzoyl)-N-phenylacrylamide and β -(3,4 AUTHOR(S): CORPORATE SOURCE: SOURCE: Research

(1979), 22(5), 228-35 CODEN: PSIRAA; ISSN: 0030-9885 Journal English CASREACT 92:198066

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Reactions of 3,4-Cl2C6H3COCH:CHCONHPh (I) with active methylene compds, Grignard reagents, hydraxines, acyl chlorides, amines and H2NCSNH2 were performed. Thus, Michael condensation of I with (EtO2C)2CH2 gave II and of I with MeCOCH2R (R = CO2Et, Me, Ph) gave III. Grignard reaction of I gave 1,4-addition products, 3,4-Cl2C6H3COCH2CHRICONHPh (IV; Rl = Ph, Et, PhCH2,4-MeOC6H4). Acylation of I and reactions with hydrazines gave the expected products. Amination of I gave IV (Rl = morpholinyl, yiddiv)!

piperidinyl,
PhCH2NH). Treatment of I with H2NCSNH2 did not give a thiazole but gave
3,4-Cl2C6H3COCH:CHCONHCSNH2. Reactions of 3,4-Cl2C6H3COCH:CHCOCl (V)

also studied. Friedel-Crafts reaction of V gave 3,4-Cl2C6H3COCH2CHR2COR2 (R2 = Ph, 4-MeC6H4). Reaction of V with 2-H2NC6H4CO2H in Et2O gave 3,4-Cl2C6H3COCH.CHCONHC6H4CO2H-2 but in pyridine the product was VI. 70012-29-2P.
RU: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation and reaction of, with hydrazine and toluidine)

ANSWER 70 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN 70012-29-2 CAPLUS 4H-3,1-Benzoxazin-4-one, 1-(3,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME) (Continued)

L4 ANSWER 71 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
1775.275
AUTHOR(S):

AUTHOR(S):

CAPLUS COPYRIGHT 2007 ACS on STN
1979:575295 CAPLUS
91:175295
Reactions with the amides and chlorides of some β-aroylecrylic acids
A. A. A.; Abdallah, M.; Soliman, E. A.

CORPORATE SOURCE:

Sammour, A.; Air, A.
A.
Pac. Sci., Ain Shama Univ., Cairo, Egypt
Egyptian Journal of Chemistry (1979), Volume Date
1976, 19(6), 1109-16
CODEN: EGJCAJ; ISSN: 0367-0422
Journal
English
CASREACT 91:175295

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

RCOCH: CHCONHCSNHR1 (R = 4-MeC6H4, 2-naphthyl; R1 = H, CH2Ph) were prepared

ROOM-CHICHCHMCHRIK (K = 4-NecSH4, Z-haphthyl; Rl = H, CH2Ph) were

apared

by treating RCOCH:CHCCONHC6H4R2-4 (R2 = H, Me, OMe) or 4-MeC6H4COCH:CHCOCI
(I) with H2NCSNHR1. 4-MeC6H4COCH:CHCONHC6H4SO2NHR3-4 [R3 = H, C(:NH)NH2,
4-methyl-2-pyrimidinyl) were obtained from I and H3NCSH4SO2NHR3-4. I

reacted with 2-H3NCSH4CO3H to give 2-H02CGH4NHCOCH:CHCOCH4Me-4, which
cyclized to the bensoxazinone II (X = 0). Reaction of II (X = 0) with
amines RNH2 in ECOM gave 2-RANHCOC6H4MHCOCH:CHCOC6H4Me-4 (R4 = CH2Ph,
4-MeC6H4), but reaction with 4-MeC6H4NH2 at 170° gave II (X =
NCSH4Me-4). Reaction of II (X = 0) with N2H4 gave III (X = 0, NNH2, R5 =
H), whereas with PhNHNH2 only III (X = NNHPh, R5 = Ph) was obtained.
71703-82-7 (APLUS

71703-82-7 CAPLUS

4H-3.1-Benzoxazin-4-one, 2-[4,5-dihydro-3-(4-methylphenyl)-1H-pyrezol-5yl]- (9CI) (CA INDEX NAME)

ANSWER 71 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

L4 ANSHER 72 OF 79
ACCESSION NUMBER:
DOCUMENT NUMBER:
1379:203645 CAPLUS
90:203645
Some reactions of \$\beta\$-(3,4-dichlorobenzoyl)-N-phenylacrylamide and \$\beta\$-(3,4-dichlorobenzoylamide and \$\beta\$-(3,4-dichlorobenzoyla)-N-phenylacrylamide and \$\beta\$-(3,4-dichlorobenzoylamide and \$\beta\$-(3,4-dichlorobenzoylamide and \$\beta\$-(3,4-dichlorobenzoylamide and \$\beta\$-(3,4-dichlorobenzoylamide and \$\beta\$-(3,4-dichlorobenzoylamide and \$\beta\$-(3,4-dichlor

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): G1

The Michael condensation of RCOCH:CHCONHPh (R = 3,4-Cl2C6H3; I) with CH2(CO2Et)2, MeCOCH2CO2Et, EtOMe, and MeCOCH2Ph gave pyrones II (R1 = PhNHCO, CO2H; R2 = CO2H, CO2Et) and cyclohexenones III (R1 = CO2Et, Me, Ph; R2 = PhNHCO). The reactions of I with Grignard reagents and amines, thiourea, hydrazines and HONH2 gave RR3 (R3 = COCH2CHR4CONHPh; R4 = morpholino, piperidino, PhCH2), ROCH:CHCONNC(S)NH2, and RC(:NR5)CH:CHCONHPh; R5 = NH2, NHPh, OH). Priedel-Craftc alkylation of C6H6 and MePh with RCOCH:CHCOCI (IV) gave RCOCH2CHRSCOR7 (R6 = R7 = Ph, 4-MeC6H4). The reaction of IV and 2-H2NC6H4CO2H gave R2CCCH:CHCONHC6H4CO2H-2.
70012-29-2P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of IV 70012-29-2 CAPUJS 4H-3).1-Benzoxazin-4-one, 1-(3,4-dichlorophenyl)-4,5-dihydro-1H-pyrazol-5-yl]- (9CI) (CA INDEX NAME)

L4 ANSMER 73 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1978:597453 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 89:197453 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION ACCESSION ACCESSION ACCESSION ACC

Cyclization of arylcarboxamidouracils. Synthesis of

new 4H-3,1-benzoxazin-4-one. Use of mass

spectrometry

AUTHOR(S): CORPORATE SOURCE: SOURCE:

as a probe Bernier, Jean Luc; Henichert, Jean Pierre Lab. Chim. Biol. Struct., Lille, Fr. Journal of Heterocyclic Chemistry (1978), 15(6),

997-1000

CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI Journal English CASREACT 89:197453

Benzoxazinone I was obtained in 66% yield from uracil II by cyclization with Ac2O. Amination of I by RNH2 (R = Me, Ph) gave 73 and 80%, resp.,

of

the ring opened products III.
68310-98-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and amination of)
68310-98-0 (APLUS
2,4(1H.3H)-Pyrimidinedione, 6-amino-1,3-dimethyl-5-(4-oxo-4H-3,1-benzoxazin-2-yl)- (9CI) (CA INDEX NAME)

ANSWER 72 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

ANSWER 73 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Page 59

L4 ANSWER 74 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1977:502374 CAPLUS DOCUMENT NUMBER: 87:102374
TITLE: 3,4-Dibwdson/ 87:102374
3,4-Dihydroquinazoline derivatives
Doria, Gianfederico; Romeo, Ciriaco; Giraldi,
Piernicola; Lauria, Francesco; Corno, Maria Luiaa;
Sberze, Piero; Tibolla, Marcello
Erba, Carlo, S.p.A., Italy
Ger. Offen, 44 pp.
CODEN: GWXXBX INVENTOR (S) : PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: Patent PAMILY ACC. NUM. COUNT: PATENT INFORMATION: 19761130 19761102 19761104 19761110 PATENT NO. KIND DATE APPLICATION NO. DE 2654215 US 4251531 IL 50849 AU 7619472 BE 848696 PI 7603391 FI 64359 NL 7613450 FR 2333511 AT 7608943 AT 355029 19770616 19810217 19801130 DE 1976-2654215 US 1976-738221 IL 1976-50849 AU 1976-19472 BE 1976-172653 FI 1976-3391 AA AA AB CAABAB CAAB CB2 19780518 19780518 19770316 19770606 19830729 19831110 19770607 19770701 19790302 19790715 19800211 19770606 19841224 19761125 19761202 19761202 FR 2333511 AT 7608943 AT 355029 DK 7605467 DK 147855 SE 7613588 NO 7604135 NO 146095 NO 146095 SI 194786 CA 1084051 SU 786894 HU 20142 AT 1976-8943 19761202 DK 1976-5467 19761203 19850610 19770606 19770607 19820419 SE 1976-13588 NO 1976-4135 19761203 19761203 19820811 CS 1976-7886 CA 1976-267090 SU 1976-2426155 HU 1976-EA167 19791231 19800819 19761203 19761203 A1 A2 B A5 A B A B A 19801207 HU 20142 HU 177817 CH 626073 JP 52071485 JP 55043464 AT 7902464 AT 357544 19810627 19761203 19811228 19811030 19770614 CH 1976-15272 JP 1976-146444 19761203 19761206 19801106 19791215 AT 1979-2464 19790403 19800710 CH 626075 PRIORITY APPLN. INFO.: 19811030 CH 1980-8855 IT 1975-29998 19801128 A 19751205 AT 1976-8943 A 19761202 CH 1976-15272 A 19761203 OTHER SOURCE(S):

ANSWER 75 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN SSION NUMBER: 1976:17267 CAPLUS MENT NUMBER: 84:17267

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

MARPAT 87:102374

AUTHOR(S):

CORPORATE SOURCE:

SOURCE :

DOCUMENT TYPE:

OTHER SOURCE(S):

ESSION NUMBER: 1976:17267 CAPLUS

WIMENT NUMBER: 84:17267
LE: Organosulfur compounds. XII. Syntheses and pharmacological activities of 2-heterocyclic-substituted 4(3H)-quinazolinones

Hornor Substituted 4(3H)-quinazolinones

Hisano, Takuzo: Ichikawa. Masataka; Nakagawa, Akira; Tauji. Masayoshi

PORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, Japan Chemical & Pharmaceutical Bulletin (1975), 23(9), 1910-16

CODEN: CPETAL; ISSN: 0009-2363

JOURNENT TYPE: JOURCE: English

GR SOURCE(S): CASRACT 44:17267

For diagram(s), see printed CA Issue.
Quinazolinones I (R - 2; 4-pyridyl, 2-thienyl, Rl = H, 2-Cl, 2-P, etc.)
were prepared from isatoic anhydride and amines or acylation of O-H2NC6H4CO2H followed by cyclisation were evaluated for hypnotic activity. Some I showed a definite hypnotic effect in intraperitoneal doses above 100 mg/Rg, whose structure-activity relationship demonstrated that R = 3-pyridyl and 4-pyridyl R1 = 2-P, 2-Cl are appropriate for the manifestation of hypnotic activity. A maximum hypnotic effect was erved in I
(R - 2-pyridyl, R1 = 0-F), the potency of which was equal to methaqualone in mice.
53180-68-0P 57696-11-4P

53180-68-0P 57696-11-4P

Salso-Se-UV 3/98-11-4V
RE: RCT (Reactant); SPM (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with amines)
53180-68-0 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(3-pyridinyl)- (9CI) (CA INDEX NAME)

57696-11-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(4-pyridinyl)- (9CI) (CA INDEX NAME)

ANSWER 74 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Antiallergic (no data) quinazolinones I (R = pentyl, 2-pyrazinyl, 4-EtOCH2CH2O6H4, 4-FC6H4, 3-CLC6H4, 3-MeOC6H4, 2-O2NC6H4, 2-R1OC6H4; R1 = Me2CH, Me, Et, allyl, Pr, Bu, Me2CHCH2, EtOCH2CH2, hexyl) and some ester and amide derivs. were prepared Thus, 2,4-(MeO2C)2C6H3NH2 was treated

2-Me2CHOC6H4COCl, 2,4-(MeO2C)2C6H3NHCOC6H4OCHMe2-2 hydrolyzed, the acid product cyclized with Ac2O, and the benzoxazine II treated with NH4OH to give I (R = 2-Me2CHOC6H4).
63746-31-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with ammonia, quinazoline from)
63746-31-6 CAPLUS
4H-3,1-Benzoxazine-6-carboxylic acid, 4-oxo-2-pyrazinyl- (9CI) (CA INDEX NAME)

L4 ANSWER 76 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:551894 CAPLUS

DOCUMENT NUMBER: 2:151894 CAPLUS

1:151894 2:1940raxyindoxyls. General and novel preparation, properties, and their role in the perphthalic acid oxidation of indoles

AUTHOR(S): Braudeau, E.; David, S.; Fischer, J. C.

DOCUMENT SURCE: Tetrahedron (1974), 30(11), 1445-55

CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: CASRECT 81:151894

GI Por diagram(s), see printed CA lessue.

AB Oxidation of 2-isopropylindole with monoperphthalic acid gave the 2-OH compound

compound
I and the (isopropylindolyl)indoxyl II. Increased reaction time gave the benzoxazinone III. Other 2-substituted indoxyls reacted similarly.
2-Isobutylindoxyl, in addition to compds. corresponding to I and II, gave the

the bridged compound IV. The mechanism of the oxidns, is discussed. 53904-12-4P RL: SBN (Synthetic preparation); PREP (Preparation) (preparation of) 53904-12-4 CAPLUS 4H-3,1-Benzoxazin-4-one, 2-(2-pyridinyl)- (9CI) (CA INDEX NAME)

A ANSWER 77 OF 79
CCESSION NUMBER:
1974:477955 CAPLUS
OCCUMENT NUMBER:
117LS:
117LS:
2,3-Dipyridylquinazoline derivatives
NOGA, Kanji; Nakagawa, Akira; Yamazaki, Shunzo; Ide,
Hiroyuki
ATENT ASSIGNEE(S):
OURCE:
OURCE:
OCCUMENT TYPE:

CCOEN JKXXAP
Patent TITLE: INVENTOR(S): DOCUMENT TYPE: LANGUAGE: PAMILY ACC. NUM. COUNT: PATENT INFORMATION: 19720727 A 19720727 PRIORITY APPLN. INPO.:

OTHER SOURCE(S):

CASREACT 81:7795

I For diagram(s), see printed CA Issue.
AB 2,3-81s(pyridyl)quinazolinones (I, R1,R2 = 2-, 3-, or 4-pyridyl) with hypnotic, ansathetic, seadative, muscle relaxant, anticonvulsant, antinflammatory, and analgesic properties were prepd by reaction of N-pyridylcarbonylanthramilic acids or their cyclized derive. with pyridylamines, RINNI2. E.g., heating 0.35 g 2-(3-pyridyl)-4H-3,1-benzoxazin-4-one and 0.176 g 3-aminopyridine 10 hrat200° yielded 0.3 g 2-(3-pyridyl)-3-(3-pyridyl)-4(3H)-quinazolinone.
2-(3-pyridyl)-3-(2-pyridyl)-3-(2-pyridyl)-3-(2-pyridyl)-4, and 2-(2-pyridyl)-4-(2-pyridyl)-4(3H)-quinazolinones were similarly prepared RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with aminopyridines)
RN 53180-68-0 CAPLUS
CN 4H-3,1-Benzoxazin-4-one, 2-(3-pyridnyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 79 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 1950:20113 CAPLUS
DOCUMENT NUMBER: 44:20113
ORIGINAL REPERENCE NO.: 44:4001a-i,4002a-c The so-called acylanthranils (3,1,4H-benzoxaz-4-ones) I. Preparation; reactions with water, ammonia, and aniline, attucture Zentmyer, David T.; Wagner, E. C. Univ. of Pennsylvania, Philadelphia Journal of Organic Chemistry (1949), 14, 967-81 CODEN: JOCEAN; ISSN. 0022-3282 AUTHOR(S): CORPORATE SOURCE: SOURCE: DOCUMENT TYPE: JOURNES LANGUAGE: Unavailable CARRET 185N: 0022-3263
LANGUAGE: Unavailable CARRET 44:2013
GI For diagram(s), see printed CA Issue.
AB The structure of the heterocyclic ring in 3,1,4H-benzoxaz-4-ones, o-C5H4.N:CR.O.CO (I), has not been decisively proved. An improved general procedure for the preparation of I is described and their behavior toward H2O, NN3, and PhNH2 is studied. I are prepared by dehydration of the corresponding N-acylanthranilic acids which in turn are obtained toward H2O,

NM3, and PhNH2 is studied. I are prepared by dehydration of the corresponding N-acylanthranilic acids which in turn are obtained according

to the method of Steiger (C.A. 39, 288.6), except o-HCONNCGH4CO2H [II].

II, m. 167°, is obtained in 90% yield by refluxing 3 hrs. 68.5 g.

o-H2NCSH4CO2H in 500 cc. C6H6 and 57 cc. 99% HCO2H. The following o-RNCGH4CO2H [II] are prepared: R = EtCO, 71.3% yield, m. 114-15°;

PrCO, 32.6%, m. 118-18.5°, Me2CHCH2CO [IV], 33.5%, m. 114-15°;

PrCO, 32.6%, m. 118-18.5°, Me2CHCH2CO [IV], 31.5%, m. 114-15°;

PrCO, 32.6%, m. 118-18.5°, Me2CHCH2CO [IV], 31.5%, m. 115-16°; AMCO [V], 32.5%, m. 193-4°; o-MCCSH4CO, 57.6%, m. 186.5-7°, p-analog, 82.5%, m. 193-4°; o-ClCSH4CO, 59.6%, m. 186.5-7°, p-analog, 96.8%, m. 204-5°, o-O2NCGH4CO, 59.6%, m. 234-5°; p-analog, 77.5%, m. 235.5°, 31.5-(02N)2CH3CO [VII], 54.7%, m. 208-9° (decomposition); nicotinyl, 71%, m. 263-4°. III are dehydrated by refluxing 0.05 mol. III with 0.4 mol. Ac20 1 hr. and then slowly distilling off 25 cc. at below 139°. The excess Ac20 is distilled off in vacuo and I recrystd. from anhydrous AcOSt and C6H14. In this

way the following I are prepared: R = Et (VIII), 74.7% yield, m. 85-6°; Pr [IX], 26.6%, m. 59-60°; Ph. 81%, m. 123-4°; o-ClCGH4, 91%, m. 139-40°; p-ClCGH4, 89.4%, m. 190°; o-O2NCGH4, 91.6%, m. 15°; p-O2NCGH4, 71.7%, m. 202°; 3-pyridyl, 80.8%, m. 153°. I (R = H) (X) prepared from II and isolated from the reaction mixture by distillation, b0.3 122°, m. 43-4°. X is hydrolyzed by atmospheric moisture and deteriorates on standing in a stoppered bottle. An attempt to prepare X from II and 100% HCO2H failed. When HCO2H is added to II and Ac2O, 3: (2: carboxyphenyl)-4-quinazolone, m. 274.5-5°, is formed. I (R = Me), prepared in 66.7% yield, m. 80-1°, is purified by sublimation at 70-5°,0.03

mm. No I are obtained from IV-VII. IV and Ac2O give some

O-ANNCGHACO2H, end Ac2O at 200° give X III and the Ac2N analog of XI, m. 66-7°. Passing NN1 1 hr. into 0.01 mol. X in the min.

mount of absolute EtOH, cooled wit

L4 ANSWER 78 OF 79 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 1969:470611 CAPLUS
DOCUMENT NUMBER: 71:70611
TITLE: 2-Amino-4H-3,1-benzoxazin-4-one
SAYIGH, Adnan A. R.; Ulrich, He
Upjohn Co.
SOURCE: U.S. 4 pp. 71:70611
2-Amino-4H-3,1-benzoxazin-4-ones
Sayigh, Adnan A. R.; Ulrich, Henri
Upjohn Co.
U.S., 4 pp.
CODEN: USXXAM DOCUMENT TYPE: Patent LANGUAGE: PAMILY ACC. NUM. CO PATENT INFORMATION: English PATENT NO. KIND DATE APPLICATION NO. DATE US 1966-603146 US 1966-603146 US 3450700 PRIORITY APPLN. INFO.: 19690617 The subject compds. are prepared Thus, COCl2 is passed into a refluxing mixture of 16.3 g. isstoic anhydride, 165 ml. PhCl, and 0.33 g. HCONNE2 until a clear solution is obtained. After purging with N, the PhCl is and the distillation continued in vacuo to yield 10.75 g. and the distillation continues in vacou to yawa-call and the distillation continues in vacou to yawa-call and continues (1) b0:3 100-30°, 30-3°. The following 2-isocypantobenzoyl chlorides are similarly prepared (substituent given): 5-Cl, 6-Meo3C; 4-Cl; 3-Br; 6-P; 3,5-Br2; 3,5-Cl2; 3,5-I2; 6-Et; 6-Pr; 3-Me; and 6-P3C. I (3.6.g.) is stirred into 2.9 g. Et3NH in 20 ml. C6H6. The temperature at 70° is reduced to 25° and the solide removed. The filtrate is evaporated to dryness, the residue taken up in Et2O, and Et2O removed in vacuo to yield 4.3 g. 2-(diethylamino)-4H-3,1-benzoxazin-4-one. The following 4H-3,1-benzoxazin-4-ones are similarly prepared 2-BuzN, 2-morpholino, 2-dihexylamino, 2-diethylamino-5-chloro. 23494-28-2P 23494-29-49
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
23494-28-2 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(4-morpholinyl)- (9CI) (CA INDEX NAME)

ANSWER 79 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 119-22°; at 10-15°, 47.2% 4-quinazolone, m. 216-17°, is formed. I (R = Et or Pr) and NH3 give 52.2% 2-ethyl-, m. 233°, and 43.1% 2-propyl-4-quinazolone, m. 200-1°, reap. By passing NH3 into I in boiling EtOH the following o-RCONHC6H4CONH2 (XIIa) are prepd.: - o-MeC6H4 (XIII), 24.4% yield, m. 217-18°; p-MeC6H4, 39.7%, m. 204-5°; o-ClC6H4 (XIV), 58.8%, m. 198-9°; p-ClC6H4, 44.8%, m. 200.5°; o-O2NC6H4 (XIV), 53.%, m. 195°; p-O2NC6H4, 61.5%, m. 215°, facctingly, 53.9%, m. 211°. Heating XIIa 0.5 hr. at 240-50° and recrystg. the product from AcOEt give the 2-substituted 4(3H), quinazolones, o-C6H4.N:CR.NNL-CO, of which the following are prepd.: R = p-MeC6H4, 38.1% yield, m. 241-2°; p-ClC6H4, 67.4%, m. 306°; p-O2NC6H4, 68.3%, m. 351-2°; p-ClC6H4, fa.7%, m. 276°. Ring closure at 250° failed with XIII-XV. Heating 0.01 mol. I with 0.011 mol. phNH2 3 hrs. on a steam and recrystn. of the product from AcoEt-C6H14 gives o-RCONHC6H4CONHPh (XVI), of which the following are prepd.: R = Et., 37.78 yield, m. 164°; Pr., 58.4%, m. 151.2°; Ph., 74.4%, m. 216-18°; o-RCC6H4, 39.9%, m. 194.5°; p-McC6H4, 51.8%, m. 220.1°; o-C1C6H4, 55.4%, m. 194.5°; p-McC6H4, 51.8%, m. 220.1°; o-C1C6H4, 55.4%, m. 194.5°; p-C1C6H4, 52.5%, m. 236-7°; o-C1C6H4, 55.4%, m. 197°; p-C2NC6H4, 52.5%, m. 236-7°; o-C1C6H4, 39.9%, m. 197°; p-C2NC6H4, 52.3%, m. 230-7.8°; nicotinyl, 61.8%, m. 248-9°. Heating XVI (R = alkyl) 0.5 hr. at 240-50° gives o-C6H4.N:CR.NPh.CO, of which the following are prepd: R = Et (XVII), 43.8% yield, m. 125-5.5°; p-R (XVIII), 53.2%, m. 120-1°; Ph. 41.9%, m. 156-7°; o-NeC6H4, 16.1%, m. 179-80°; p-MeC6H4, 54.6%, m. 178*; p-C1C6H4, 39.8%, m. 177°; p-O2NC6H4, 43.2%, m. 224-5°; 3-pyridyl, 57.7%, m. 175-6.5° viII (0.01 mol.) and 0.011 mol. PhNP2 heated 0.5 hr. at 150-60° give 67.8% XVII; IX and PhNP2 give XVIII. When 4.95 g. II, 24.4 g. Ac2O, and 0.49 g. NaOAc are refluxed, transecylation takes place, giving 44.7% I (R = Me), m. 78-80°. The ultraviolet absorption spectrum of I (R = Me) is compared with that of o-AcNIC6M4CO2M and occ

oic anhydride in neutral and alk. dioxane, and the infrared absorption spectrum of I (R = Me) is given. The results seem to indicate that the so-called acylanthranils have the structure I. 53180-68-0P, 4H-3,1-Benzoxazin-4-one, 2-(3-pyridyl)-RL: PREP (Preparation)

(preparation of)
53180-68-0 CAPLUS
4H-3,1-Benzoxazin-4-one, 2-(3-pyridinyl)- (9CI) (CA INDEX NAME)